SENATE

REPORT 112 - 18

IMPLEMENTATION OF NATIONAL CONSENSUS APPLIANCE AGREEMENTS ACT

MAY 18, 2011.—Ordered to be printed

Mr. BINGAMAN, from the Committee on Energy and Natural Resources, submitted the following

REPORT

[To accompany S. 398]

The Committee on Energy and Natural Resources, to which was referred the bill (S. 398) to amend the Energy Policy and Conservation Act to improve the energy-efficiency of certain appliances and equipment, and for other purposes, having considered the same, reports favorably thereon with amendments and recommends that the bill, as amended, do pass.

The amendments are as follows:

1. On page 70, between lines 20 and 21, insert the following:

SEC. 16. STANDARDS FOR CERTAIN REFLECTOR LAMPS.

Section 325(i) of the Energy Policy and Conservation Act (42 U.S.C. 6295(i) is amended by adding at the end the following:

- "(9) REFLECTOR LAMPS.—In conducting rulemakings for reflector lamps after January 1, 2014, the Secretary shall consider-
 - "(A) incandescent and nonincandescent technologies; and "(B) a new energy-related measure, other than lumens per watt, that is based on the photometric distribution of those lamps.".
- 2. On page 70, line 21, strike "16" and insert "17".
- 3. On page 71, line 16, strike "17" and insert "18".
- 4. On page 74, line 1, strike "18" and insert "19".
 5. On page 79, line 1, strike "19" and insert "20".
- 6. On page 79, line 11, strike "combustion" and insert "thermal". 7. On page 80, line 1, strike "**20**" and insert "**21**".

- 8. On page 81, line 12, strike "21" and insert "22".
- 9. On page 85, line 6, strike "22" and insert "23".
- 10. On page 85, line 18, strike "23" and insert "24". 11. On page 86, line 12, strike "24" and insert "25".

PURPOSE OF THE MEASURE

The purpose of S. 398 is to promote energy efficiency by amending Subchapter III, Part A, of the Energy Policy and Conservation Act (EPCA) (42 U.S.C. 6291 et seq.) regarding the Energy Conservation Program for Consumer Products Other than Automobiles. The bill would establish and revise energy efficiency standards for several classes of consumer products, and it would make operational changes to the program including expansion of the petition processes for updating energy efficiency standards and test procedures, revision of program definitions and test methods, and direct the Secretary of Energy to conduct several studies.

Background and Need

Residential appliances and other consumer products account for about two-thirds of the nation's electricity consumption. Efforts to reduce energy use for these products can be challenging because many buyers do not consider the cost of energy when purchasing a product, even though the lifetime cost of the energy used may be

several times greater than a product's purchase price.

Congress first authorized energy efficiency standards for consumer appliances in 1975, following the oil embargo of 1973–1974, in an effort to reduce our dependence on foreign oil and our vulnerability to future import interruptions. Initially, the Energy Policy and Conservation Act of 1975 (EPCA) (Public Law 94–163) authorized the Federal Energy Administrator to establish test procedures for measuring the energy efficiency of a limited number of consumer products, and to require manufacturers label the products with their efficiency ratings. EPCA also required the Administrator to set voluntary efficiency improvement targets, and to impose mandatory efficiency standards only if the voluntary targets proved unsuccessful.

In 1978, however, Congress expanded and strengthened the appliance efficiency program by requiring the Secretary of Energy to prescribe mandatory energy efficiency standards for certain consumer products and authorizing him to prescribe standards for others. The Secretary declined to adopt mandatory standards in 1983, and the United States Court of Appeals for the District of Columbia Circuit held the Secretary's "no-standard standards" unlawful and not supported by substantial evidence. Natural Resources De-

fense Council v. Herrington, 768 Fed 1355 (D.C. Cir. 1985).

Meanwhile, manufacturers and efficiency advocates recognized that direct Congressional enactment of standards that were negotiated among stakeholders could be implemented more quickly and would provide greater regulatory certainty and stability than standards set through U.S. Department of Energy (DOE) rulemaking. In 1987, Congress first enacted legislation, the National Appliance Energy Conservation Act of 1987 (Public Law 100–12) based on agreements negotiated among appliance manufacturers, energy efficiency advocates, and consumer groups. Legislation

based on subsequent stakeholder agreements was enacted in: the National Appliance Energy Conservation Amendments of 1988 (Public Law 100–357); the Energy Policy Act of 1992 (Public Law 102–486); the Energy Policy Act of 2005 (Public Law 109–58); and the Energy Independence and Security Act of 2007 (Public Law 110–140).

S. 398 is needed to codify additional agreements reached between industry, energy efficiency advocates, and consumer groups that increase certain existing standards, establish new standards for certain products, or make operational changes to the program to facilitate consideration of petitions for changes to test methods and standards. Enactment of S. 398 is expected to save the nation nearly 850 trillion BTUs by 2030, yield net economic savings to consumers of more than \$43 billion by 2030, and reduce annual carbon dioxide emissions by 47 million metric tons by 2030.

LEGISLATIVE HISTORY

S. 398 is based on several appliance standards bills that were considered in the 111th Congress. The first of these bills is S. 598, which was introduced March 16, 2009, and a hearing was held on March 19, 2009 (S. Hrg. 111–24). The amended text of S. 598 was included in Title II of S. 1462, the American Clean Energy Leadership Act of 2009, as reported from the Committee on Energy and Natural Resources on July 16, 2009 (S. Rpt. 111–48). S. 398 is also based on bills S. 1696, S. 2908, S. 3054 and S. 3059, on which a hearing was held March 10, 2010 (S. Hrg. 111–402). The provisions of all these bills were consolidated, revised, and introduced as S. 3925 on September 29, 2010, but consideration of this bill ended with the adjournment of the 111th Congress.

S. 398 is closely based on S. 3925, and was introduced in the 112th Congress on February 17, 2011, by Senator Bingaman, for himself and Senator Murkowski. The Committee held a hearing on March 10, 2011, and ordered the legislation favorably reported, with amendments, at a business meeting on April 12, 2011.

COMMITTEE RECOMMENDATION AND TABULATION OF VOTES

The Committee on Energy and Natural Resources, in open business session on April 12, considered S. 398 and by a majority vote of a quorum present, recommends that the Senate pass the bill, if amended as described herein.

The roll call vote on reporting the measure was 18 yeas and 4 nays as follows:

Yeas	Nays
Mr. Bingaman	Mr. Barrasso
Mr. Wyden	Mr. Risch
Mr. Johnson	Mr. Lee
Ms. Landrieu	Mr. Paul
Ms. Cantwell	

Mr. Sanders*
Ms. Stabenow
Mr. Udall*
Ms. Shaheen*
Mr. Franken*
Mr. Manchin

Mr. Coons

Ms. Murkowski

Mr. Burr*

Mr. Coats

Mr. Portman*

Mr. Hoeven

Mr. Corker*

*Indicates voted by proxy

COMMITTEE AMENDMENTS

The Committee adopted 11 amendments to S. 398. The first adds a new section 16 to the bill. Section 16 establishes two new factors that the Secretary shall consider in conducting rulemakings for reflector lamps after January 1, 2014. Nine of the remaining ten amendments (2–5 and 7–11), renumber the remaining sections of the bill to reflect addition of the new section 16. The remaining amendment (number 6) changes the word "combustion" to "thermal" to clarify the efficiency standard for commercial gas furnaces.

SECTION-BY-SECTION ANALYSIS

Section 1. Short title; table of contents

Section 2. Energy conservation standards

Section 2 clarifies that 'energy conservation standard' means one or more performance or design requirements such as energy and water efficiency. Section 2 also adds definitions, effective dates, and standards for: central air conditioners and heat pumps, throughthe-wall central air conditioners; through-the-wall central air conditioning heat pumps; small-duct, high-velocity systems; and non-weatherized furnaces, as agreed to between manufacturers and efficiency advocacy groups. Finally, this section provides that building codes may allow appliance standards to exceed the Federal standard in certain cases.

Section 3. Energy conservation standards for heat pump pool heaters

Section 3 adds definitions, standards and effective dates for heat pump pool heaters, as agreed to between manufacturers and efficiency and consumer advocacy groups.

Section 4. GU-I 24 base lamps

Section 4 adds definitions, standards and effective dates for the next-generation, GU-24 lamps, lamp sockets, and adaptors, as agreed to between manufacturers and efficiency and consumer advocacy groups.

Section 5. Efficiency standards for bottle-type water dispensers, commercial hot food holding cabinets, and portable electric spas

Section 5 adds definitions, exclusions, test procedures, standards and effective dates for bottle-type water dispensers, commercial hot food holding cabinets, and portable electric spas, as agreed to between manufacturers and efficiency and consumer advocacy groups.

Section 6. Test procedure petition process

Section 5(a) provides that any person may petition DOE to prescribe or amend test procedures for consumer products and establishes deadlines for DOE to respond to such petitions. Section 5(b) clarifies that DOE shall periodically review test procedures for certain industrial equipment, and provides that any person may petition DOE to prescribe or amend test procedures for such equipment and establishes deadlines for DOE to respond to such petitions. Section 5 also provides that DOE may use the Direct Final Rule procedure currently available to prescribe consensus standards, to prescribe consensus test procedures.

Section 7. Amendments to home appliance test methods

Section 7 sets deadlines for DOE rulemakings regarding refrigerator and freezer, clothes washer, and clothes dryer test methods.

Section 8. Credit for Energy Star smart appliances

Section 8 directs federal officials to determine whether to update Energy Star criteria for certain products to incorporate smart grid and demand response features.

Section 9. Video game console energy efficiency study

Section 9 directs DOE to conduct a study of video game console energy use and opportunities for energy savings, and upon completion of the study to determine whether to establish an efficiency standard. If standards are not established, then DOE shall conduct a follow-up study.

Section 10. Refrigerator and freezer standards

Section 10 updates definitions, exceptions, standards and effective dates for new standards for refrigerators and freezers, as agreed to between manufacturers and efficiency and consumer advocacy groups.

Section 11. Room air conditioner standards

Section 11 establishes new standards and effective dates for room air-conditioners, as agreed to between manufacturers and efficiency and consumer advocacy groups.

Section 12. Uniform efficiency descriptor for covered water heaters

Section 12 directs DOE to publish a final rule that establishes a uniform efficiency descriptor and test methods for covered water heaters. The section also sets forth other provisions necessary to transition from the current regulations which have different descriptors for two size-classes of water heaters, to having a single descriptor for all covered water heaters.

Section 13. Clothes dryers

Section 13 establishes new standards and effective dates for clothes dryers, as agreed to between manufacturers and efficiency and consumer advocacy groups.

Section 14. Standards for clothes washers

Section 14 establishes new standards and effective dates for clothes washers, as agreed to between manufacturers and efficiency and consumer advocacy groups.

Section 15. Dishwashers

Section 15 establishes new standards and effective dates for dishwashers, as agreed to between manufacturers and efficiency and consumer advocacy groups.

Section 16. Standards for certain reflector lamps

Section 16 establishes two new factors that the Secretary shall consider in conducting rulemakings for reflector lamps after January 1, 2014.

Section 17. Petition for amended standards

Section 17 requires DOE to publish an explanation of DOE's decision to grant or deny a petition for a new or amended standard (filed under current law) within 180 days, and to publish the new rule within 3 years in those cases where the petition is granted.

Section 18. Prohibited acts

Section 18 updates certain enforcement provisions to clarify that the prohibitions under current law apply to distributors, retailers, and private labelers as well as manufacturers, and clarifies that prohibitions must be "knowingly" violated in the case of regional standards.

Section 19. Outdoor lighting

Section 19 establishes definitions, test methods, standards, and effective dates for certain types of outdoor lighting, as agreed to between manufacturers and efficiency and consumer advocacy groups.

Section 20. Standards for commercial furnaces

Section 20 establishes a new standard and effective date for commercial furnaces, as agreed to between manufacturers and efficiency and consumer advocacy groups.

Section 21. Service over-the-counter, self-contained, medium temperature commercial refrigerators

Section 21 establishes new definitions and a standard and effective date for certain service-over-the-counter refrigerators, as agreed to between manufacturers and efficiency and consumer advocacy groups.

Section 22. Motor market assessment and commercial awareness program

Section 22 directs DOE to assess the U.S. electric motor market and develop recommendations on ways to improve the efficiency of motor systems. It also requires DOE to periodically update this information; estimate the savings attributable to the Save Energy Now Program; make recommendations to the Census Bureau on surveys to support DOE's motor activities; and prepare an update to the Motor Master+ program of DOE. Finally, based on the assessment and recommendations, the section would direct DOE to

establish a program to: increase awareness of the savings opportunities of using higher efficiency motors, improve motor system procurement practices, and establish criteria for making decisions regarding electric motor systems.

Section 23. Study of compliance with energy standards for appliances

Section 23 directs DOE to conduct, and submit to Congress with any recommendations, a study on the degree of compliance with energy standards for appliances including an investigation of compliance rates and options for improving compliance.

Section 24. Study of direct current electricity supply in certain buildings

Section 24 directs DOE to conduct, and submit to Congress with any recommendations, a study of the costs and benefits of requiring high-quality, direct current electricity supply in certain buildings and to determine, if this requirement is imposed, what the policy and role of the Federal Government should be.

Section 25. Technical corrections

Section 25 makes technical corrections to the Energy Independence and Security Act of 2007 (EISA), the Energy Policy Act of 2005, and the Energy Policy and Conservation Act regarding the appliance efficiency standards prop-am, Title III of EPCA.

COST AND BUDGETARY CONSIDERATION

The following estimate of costs of this measure has been provided by the Congressional Budget Office:

S. 398—Implementation of National Consensus Appliance Agreements Act of 2011

S. 398 would establish and revise a variety of energy-efficiency standards for certain types of consumer products. The bill also would make changes to the Department of Energy's (DOE's) regu-

latory authority and processes related to such standards.

Based on information from DOE, CBO estimates that implementing S. 398 would have no significant net impact on the federal budget. According to DOE, the agency is already pursuing rulemakings related to testing and energy-efficiency standards of certain products for which S. 398 would specify standards. By streamlining regulatory procedures for such products, S. 398 could reduce the need for future appropriations to continue rulemaking processes related to them. On the other hand, under S. 398, certain new classes of consumer products would become subject to DOE regulation, adding to the agency's anticipated workload. Based on information from DOE, CBO estimates that any net change in the agency's costs to regulate products affected by S. 398, which are subject to appropriation, would be insignificant in any year. Enacting S. 398 would not affect direct spending or revenues; therefore, pay-as-you-go procedures do not apply.

S. 398 contains intergovernmental mandates as defined in the Unfunded Mandates Reform Act (UMRA) because it would preempt state and local laws governing energy-efficiency standards, including those for water dispensers, commercial cabinets for holding hot

food, portable electric spas, video game consoles, and certain types of lamps. While those preemptions would limit the application of state and local law, CBO estimates that they would impose no duty on state, local, or tribal governments that would result in addi-

tional spending.

By establishing new energy-efficiency standards for appliances and other products, the bill also would impose private-sector mandates, as defined UMRA, on manufacturers of those products. In addition, the bill would revise existing standards for certain other products. DOE is currently pursuing rulemakings related to those standards. To the extent the revised standards in the bill would impose more stringent standards than the standards to be issued by DOE or would accelerate the effective date of those standards, the bill would impose a mandate on manufacturers of those products. Based on information from DOE and industry sources, CBO estimates that the cost to comply with some of the new standards would not be substantial. However, because of limited information about compliance costs and uncertainty about the rules to be issued by DOE, CBO cannot estimate the costs of several of the remaining mandates. Consequently, we cannot determine whether the aggregate costs of the private-sector mandates in the bill would exceed the annual threshold established in UMRA (\$142 million in 2011, adjusted annually for inflation).

The CBO staff contacts for this estimate are Megan Carroll (for federal costs), Ryan Miller (for the impact on state and local governments), and Amy Petz (for the private-sector impact). This estimate was approved by Theresa Gullo, Deputy Assistant Director

for Budget Analysis.

REGULATORY IMPACT EVALUATION

In compliance with paragraph 11(b) of rule XXVI of the Standing Rules of the Senate, the Committee makes the following evaluation of the regulatory impact which would be incurred in carrying out the legislation.

The bill establishes energy efficiency standards on manufacturers for certain classes of heating and cooling equipment, washing equipment, lighting, and other consumer appliances. There will be economic costs associated with certain of these requirements, though these costs will be offset by reduced energy consumption and by the reduction in rulemaking costs by the U.S. Department of Energy.

No personal information would be collected in administering the program. Therefore, there would be no impact on personal privacy.

CONGRESSIONALLY DIRECTED SPENDING

The bill, as reported, does not contain any congressionally directed spending items, limited tax benefits, or limited tariff benefits as defined in Rule XLIV of the Standing Rules of the Senate.

EXECUTIVE COMMUNICATIONS

The testimony provided by the U.S. Department of Energy at the March 10, 2010, hearing on S. 398 follows:

KATHLEEN HOGAN, DEPUTY ASSISTANT SECRETARY FOR ENERGY EFFICIENCY, OFFICE OF ENERGY EFFICIENCY AND RENEWABLE ENERGY, DEPARTMENT OF ENERGY

Chairman Bingaman, Ranking Member Murkowski, Members of the Committee, thank you for the opportunity to discuss the Implementation of National Consensus Appliance Agreements Act of 2011 (S.398) and the Better Use of Light Bulbs Act (S.395).

In June 2009, President Obama said, "One of the fastest, easiest, and cheapest ways to make our economy stronger and cleaner is to make our economy more energy efficient." Energy-conserving appliance standards are one of the significant steps the Administration has taken to save energy in homes and businesses nationwide, and pave the way toward a clean energy future for our country. Since January 2009, the Department of Energy has finalized new efficiency standards for more than twenty household and commercial products, which are projected to cumulatively save consumers between \$250 billion and \$300 billion over the next 20 years. These standards can provide an immediate and economically responsible way to increase the nation's energy security while protecting the environment. Improvements in energy efficiency can be made today to yield significant near-term and long-term economic and environmental benefits for the nation. A

The U.S. Department of Energy (DOE) is pleased to work with you and your fellow Committee Members to make our homes, offices, factories, vehicles, and appliances more energy efficient. The Department's energy efficiency efforts include promoting and implementing energy efficiency policies and practices; strengthening consumer education and outreach on energy efficiency as a cost-saving resource; and accelerating market adoption of energy efficient technologies that save families and businesses money.

My comments focus on two pieces of pending legislation related to energy efficiency standards. First, I will discuss the Implementation of National Consensus Appliance Agreements Act of 2011 before turning to the Better Use of Light Bulbs Act.

Implementation of National Consensus Appliance Agreements Act of 2011 (S.398)

S.398 codifies agreements that were negotiated, signed, and promoted by a cross-section of stakeholders representing consumer advocacy groups, manufacturers, manufacturer trade associations, and energy efficiency advocacy organizations, all of whom support this bill. The negotiated consensus agreements would establish energy conservation standards for 14 products, several of which are in the midst of DOE's ongoing standards and test procedure rulemakings.

In 2007, Congress recognized the importance of negotiated consensus standards, amending the Energy Policy and Conservation Act (EPCA) to allow for an expedited rulemaking process in the event a representative group of stakeholders could reach agreement. Because several DOE rules currently under development and review overlap

¹ http://www.whitehouse.gov/the_press_office/Remarks-by-the-President-on-Energy/

http://www.whitehouse.gov/issues/energy-and-environment

³ http://www.energy.gov/news/9582.htm

⁴ See, for example: McKinsey and Company (2007). Reducing U.S. Greenhouse Gas Emissions: How Much at What Cost? (http://www.epa.gov/cleanenergy/documents/suca/cost-effectiveness.pdf) and Lazard Associates. Feb. 2009. Levelized Cost of Energy Analysis Version 3.0.

with the proposed consensus standards, the agency cannot at this time present a position that would presuppose the level of the final standards outcome; however, the analyses accompanying the proposed rules for these standards suggested potential net benefits of tens of billions of dollars in fuel savings and lower greenhouse gas emissions.

Manufacturers and manufacturer trade associations representing the vast majority of the manufacturers in each appliance market recognize they would also benefit from consensus agreements. S.398 could provide regulatory certainty for industry and could reduce litigation risk by setting the time table and accompanying requirements for industry to meet, all of which could help manufacturers in planning their investments when manufacturing compliant products.

S.398 could also allow DOE to respond to industry and efficiency advocates' requests for greater technical flexibility in DOE test procedures and energy conservation standards by giving the department the authority to regulate based on multiple efficiency descriptors. These additional tools could ensure that the metrics DOE uses in its standards remain flexible and meaningful as industry continues to create newer and more innovative products.

S.398 appears to prescribe some duplicative procedural requirements that could put an unnecessary resource burden on DOE. For example, the bill's requirement that DOE respond in a published rulemaking to any petition requesting amended standards is unnecessary given that DOE already must review each standard every six years—and the evaluation period begins years before that. Similarly, the bill adds provisions giving stakeholders the right to petition for a test procedure review, a right they already hold under the current law.

In summary, S.398 contains provisions that represent industry, advocate, and consumer consensus and that could streamline DOE's standard-making process. Because several DOE rules currently under OMB review overlap with the proposed consensus standards, the agency cannot at this time present a position that would presuppose the final outcome of the rulemaking deliberative process.

Better Use of Light Bulbs Act (S.395)

This legislation would repeal portions of the bi-partisan Energy Independence and Security Act of 2007 (EISA), which includes higher efficiency standards for general service incandescent lamps that will phase in over the coming years. The first iteration of the standards is scheduled to take effect on January 1, 2012, and will require 100 Watt bulbs to be roughly 25 percent more efficient.

The Administration strongly supports these standards, and joins industry and energy efficiency organizations in opposing S.395. The EISA lighting standards are projected to save families and businesses money, empower consumers with lighting choices, and help protect the environment. DOE projects that if S.395 were enacted, U.S. primary energy

consumption would increase by 21 quads and greenhouse gas emissions could increase by more than 330 million metric tons⁵ over the next 30 years.

The EISA standards may generate significant savings for consumers. Lighting represents about 10 percent of a typical family's electric bill. Using EISA-compliant light bulbs could save consumers nearly \$6 billion in 2015 alone. A household that upgrades 15 inefficient incandescent light bulbs could save about \$50 per year.

DOE projects that these standards will help Americans further recognize the savings potential they are already beginning to realize. According to a recent USA TODAY/Gallup poll, nearly three out of four Americans say they have replaced inefficient bulbs with compact fluorescent lights (CFLs) or light-emitting diodes (LEDs) over the last few years, and 84 percent of those Americans are very satisfied or satisfied with their newer bulbs.⁹

Further, since the standards are performance-based, consumers will be able to choose from an array of efficient bulbs, including incandescent halogens, CFLs, and LEDs. They establish technology-neutral, minimum requirements around the amount of light delivered per unit of energy consumed, which is

helpful for consumers.

S.395 could jeopardize the required application of an important label on lighting products, removing a key tool for consumers to make informed choices. For decades, Americans chose light bulbs based on how much energy they consume (watts) instead of on how much light they emit (lumens). Selecting a light bulb based on lumens will help consumers choose how much light they want while saving money by making smarter, energy-saving choices. To help consumers better understand lumens, the Federal Trade

Lighting Facts Per Bulb		
Brightness	820 lumens	
Estimated Yearly Energy Cost \$7.23 Based on 3 hrs/day, 11¢/kWh Cost depends on rates and use		
Life Based on 3 hrs/day	1.4 years	
Light Appearance Warm	Cool	
2700 K	•	
Energy Used	60 watts	

Commission will release a new label (shown at the right) for light bulbs this summer, similar to the nutrition labels on food products with which Americans are familiar. ¹⁰ The label will not only contain lumen output, it will also provide the estimated operating cost of a bulb for a year, and the color quality of the light, which can range from the warm light to cooler bluish light. Energy-saving options from efficient incandescent bulbs to CFLs to LEDs can all be found on the warm side of the spectrum, providing the same light as less-efficient bulbs.

⁵ http://www1.eere.energy.gov/buildings/appliance_standards/pdfs/en_masse_tsd_march_2009.pdf

⁶ http://www.energysavers.gov/your_home/lighting_daylighting/index.cfm/mytopic=11975

⁷ U.S. Department of Energy analysis (2011), assuming the light bulb is on for two hours per day, an electricity rate of \$0.11 per kilowatt-hour, and comparing a 100 Watt incandescent to a 26 Watt CFL. No rebound effect is assumed.

⁸ U.S. Department of Energy analysis (2011)

⁹ USA Today. February 17, 2011 http://content.usatoday.com/communities/greenhouse/post/2011/02/poll-americans-ok-newer-light-bulbs/1

¹⁰ http://www.ftc.gov/opa/2010/06/lightbulbs.shtm

At DOE, we will work with partners to provide accurate and consumer-friendly information through our website, public service announcements, and other media. California began the transition to energy-saving lighting in January 2011, so DOE will analyze the State's experience and will adopt best practices to help consumers become comfortable with the national lighting transition. DOE also plans to work with retailers and consumer groups to help them understand the new standards and emphasis on lumens.

There is broad consensus support for the EISA standards within the lighting industry, which continues to prepare to implement them. New factories producing more efficient lighting choices have opened. Old factories have been retrofitted to produce more efficient bulbs. Further, should these standards be repealed by S.395, many states could implement their own lighting standards. This could generate confusion among consumers in the market and would force the lighting industry to face a complex patchwork of different lighting standards in different areas, leading to higher regulatory compliance costs. A uniform national standard ensures a national market for efficient bulbs.

The EISA lighting standards may also provide incentives for innovation and economic competitiveness. Over the past ten years, portions of the lighting market have dramatically evolved, in part due to lighting efficiency requirements. For example, linear fluorescent lamp standards enacted by the Energy Policy Act of 2005, may have contributed to the development of a larger market for higher-efficiency alternatives. Since the enactment of EISA just three years ago, many new halogen, CFL, and LED lamp products have appeared on the market, providing consumers with even more choices in lighting. Over the past 20 years, CFL prices have decreased about 10 fold (approximately \$20 in 1990 to \$2.50 today). So companies are continuing to innovate and raise the bar for energy efficient lighting while lowering costs, and DOE believes the EISA standards play a part in that trend.

Conclusion

In summary, S.398 contains provisions that represent industry, advocate, and consumer consensus, that could streamline DOE's standard-making process. S.395, on the other hand, could cost consumers and manufacturers money and detrimentally affect the nation's economy, energy security, and environmental imperatives.

DOE is continually working to seize the opportunities energy efficiency offers, saving families and businesses money by saving energy. There are many opportunities to further improve energy efficiency in appliances and products that consumers and businesses use every day. Therefore, the Department continues to strive to establish cost-effective commercial and residential appliance standards. DOE is constantly attempting to modernize, improve, and tailor the appliance standards to respond to improvements in

 $^{^{11}\} http://www.energystar.gov/ia/products/downloads/CFL_Market_Profile.pdf$

energy efficient technology, while being responsive to legislative and regulatory requirements.

Thank you again for the opportunity to offer the Department's views on these proposed pieces of legislation. I am happy to answer any questions Committee Members may have

Background: A Section by Section Description as Each Relates to the Appliance Standards Program Activities

S.398 - Implementation of National Consensus Appliance Agreements Act of 2011

Sec 2. Energy Conservation Standards

- (a) Multiple efficiency descriptors: This section amends the definition of energy conservation standard to allow DOE to consider multiple efficiency descriptors for the same product. Currently, DOE does not have authority to regulate based on multiple efficiency descriptors for many of its covered products. The lack of such authority has prevented DOE from responding positively to stakeholder requests for the use of multiple efficiency descriptors. This provision would allow DOE greater flexibility in the technical formulation of test procedures and energy conservation standards.
- (c) Regional standards for central air conditioners and heat pumps: This section specifies regional standards through the adoption of the consensus efficiency requirements for central air conditioners and central air conditioning heat pumps.
- (c) Standards for niche types of central air conditioners and heat pumps (i.e., through-the-wall and small duct high velocity systems): This section implements the standard provided by DOE's Office of Hearing and Appeals through exception relief for through-the-wall and small duct high velocity systems. In the absence of legislation permanently adopting the efficiency levels provided in the exception relief for these products or other legislative change addressing anti-backsliding in this context, DOE would not be able to consider amended energy conservation standards for these product types because the current Federal standards exceed the energy efficiency potential of these products due to size constraint limitations. This section provides a permanent solution to the current exception relief and provides DOE with the potential possibility of conducting a rulemaking in the future for these products.
- (e) Regional standards for furnaces: This section specifies regional standards through the adoption of the consensus efficiency requirements for oil-fired and weatherized residential furnaces.
- (f) Allowance for State building codes to exceed Federal standards: This section provides a pathway for State buildings codes to exceed Federal standards for certain types of products and new construction applications. This section implements a portion of the consensus agreement for residential furnaces and central air conditioners and heat pumps, which sets these more stringent levels as targets for building codes. Currently, DOE cannot consider different standards for new and existing construction either through

building codes or Federal standards. DOE analyses of energy efficiency standards in many cases demonstrate that high efficiency products may be more economically justified in new buildings compared with replacement product applications. This is because some efficiency technologies require not only changes in the equipment itself but also in how the equipment is installed in a building. Since whole-building standards can address both equipment features and the building system within which they operate, such codes can sometimes address the efficiency improvements more economically than equipment standards alone. Currently due to Federal preemption, building codes cannot take advantage of such economically viable energy efficiency opportunities because they cannot specify equipment standards that are more stringent than Federal standards. Instead, building codes can only specify more stringent requirements for energy-efficient appliances as one pathway to meeting the code's requirements, and an option to install appliances which meet the national energy conservation standard levels must remain available.

Sec. 3. Energy Conservation Standards for Heat Pump Pool Heaters.

This section provides DOE with the authority to regulate and sets the initial test procedure and standard for heat pump pool heaters. DOE's current regulatory program only includes gas heaters for pools and spas. This section would expand DOE's authority to include a comparable type of equipment for households in warmer climates and with electricity-only energy supplies. It is unclear if this section would apply to electric pool and spa heaters that do not utilize heat pump technologies.

Sec. 4. GU-24 Base Lamps.

This section prohibits incandescent lamp designs for use with GU-24 sockets and prohibits the use of socket adaptors to convert a GU-24 socket to any other socket type. The GU-24 socket is a pin-based design that is an alternative to the standard Edison socket that is commonly used for incandescent bulbs. The GU-24 socket is commonly used with certain designs of compact fluorescent lamps.

Sec. 5. Bottle-Type Water Dispensers, Commercial Food Holding Cabinets and Portable Electric Spas.

This section adds bottle-type water dispensers, commercial food holding cabinets and portable electric spas to the Appliance Standards Program and establishes energy conservation standards for each product, based on the existing standards adopted by the California Energy Commission (CEC).

Sec. 6. Test Procedure Petition Process.

This section establishes a petition process where parties can petition for a rulemaking to amend the existing test procedures. Parties already have the right to petition for a rulemaking to amend the existing test procedures, so this provision appears duplicative.

Sec. 7. Refrigerator-Freezer, Clothes Washer, and Clothes Dryer Test Procedures. This section requires DOE to finalize the amendments to the refrigerator, refrigerator-freezer and freezer test procedures DOE proposed in December 2010 within 90 days of enactment of the legislation. Additionally, this section requires DOE to publish an

amended test procedure for clothes dryers no later than 180 days of enactment of the legislation, which is limited to considering amendments resulting from the testing of dryers with automatic termination controls. Lastly, this section requires DOE to publish an amended test procedure for clothes washers.

Sec. 8. Credit for Energy Smart Appliances.

This section would require the Environmental Protection Agency (EPA) to decide whether to update ENERGY STAR criteria to incorporate smart grid and demand response features. While this provision may seem to only affect EPA, EPA uses DOE's test procedures to administer the ENERGY STAR program for many of DOE's regulatory products. This could have a significant impact on DOE if amendments to these test procedures are needed to support EPA in these efforts.

Sec. 9. Study on Video Game Consoles.

This section would require DOE to conduct a study on energy use and opportunities for energy savings for video game consoles.

Sections. 10, 11, 13, 14 and 15. Refrigerator, Room Air Conditioner, Clothes Dryer, Clothes Washer, and Dishwasher Standards.

These sections would adopt the consensus appliance standards recommendations for certain types of home appliances.

Sec. 12. Water heater efficiency descriptor.

This section includes a provision, which would require the Department of Energy to establish a uniform efficiency descriptor and test method for covered water heaters by issuing a final rule no later than 180 days after enactment. DOE's current regulatory program establishes separate efficiency descriptors, test procedures, and standards for covered residential and commercial water heaters based on characteristics, such as rated storage volume and input ratings. This bill would provide DOE with more flexibility as compared to the current regulatory scheme for regulating different types of covered water heaters (i.e., both residential and commercial) using the same metric and test procedure.

Sec. 16. Petition for Amended Standard.

This section would require DOE to publish a final rule or determination within three years of receipt of a petition for rulemaking to amend an existing energy efficiency standard. This requirement, if enacted, would add a seemingly unnecessary burden on DOE, since it is already required to review standards every six years to determine whether they warrant amendment.

Sec. 17. Prohibited Acts.

Currently, DOE's authority to enforce its energy and water conservation standards is limited to manufacturers, including importers, engaged in specific conduct. This provision would expand DOE authority to include distributors, retailers, or private labelers in addition to manufacturers and importers from offering for sale or to distribute non-compliant products. This would give DOE more flexibility in enforcing its regulatory program.

Sec 18. Outdoor Lighting.

This section would give DOE authority to set minimum efficiency standards for additional types of commercial, industrial, and outdoor lamps. Specifically, the section would establish minimum efficacy standards for certain high-output double-ended quartz halogen lamps and end production of general purpose mercury vapor lamps. Alternative lighting options that meet these standards are commercially available. These provisions are also consistent with the on-going DOE activities to set efficiency standards for particular high intensity discharge lamps and lamp ballasts.

Sec. 19. Standards for Commercial Furnaces.

This section would adopt and expand DOE's authority to include additional prescriptive requirements for commercial furnaces. Currently, commercial furnaces are only subject to energy efficiency requirements because DOE does not have the authority to consider dual-metrics for this type of equipment. Gas-fired and oil-fired furnaces that meet the standards in this section are commercially available.

Sec. 20. Standards for Over the Counter, Self-Contained Medium Temperature Commercial Refrigerators.

Over the counter, self-contained medium temperature commercial refrigerators are those refrigerators that are used in retail establishments to display fresh food products. Given the design of the products, it is very difficult for them to meet the standards that are scheduled to go into effect on January 1, 2012. Under current law, DOE cannot recall these standards, as back-sliding is explicitly prohibited by EPCA. This section of the legislation would adjust the Federal standards for these certain types of commercial refrigeration equipment to lower efficiency levels.

Sec. 21. Motor Assessment.

This section would require DOE to collect information on electric motor manufacture, shipment and sales. The Census Bureau previously collected this data, but it has since discontinued those efforts. This task falls beyond the normal purview of the Energy Efficiency and Renewable Energy Office, but the Energy Information Administration in DOE may be capable of performing such assessment. Based on the Assessment, DOE would be required to establish a national program to increase awareness of motor efficiency.

Sec. 22. Study on Compliance with Standards.

This section would require DOE to conduct a study on manufacturer compliance with energy efficiency standards.

Sec. 23. Study on Direct Current Electricity Supply.

This section would require DOE to conduct a study on the costs and benefits of direct current electricity. This study would be the responsibility of the Office of Electricity Reliability in DOE.

Sec. 24. Technical Corrections.

This section would make numerous technical corrections, many of which DOE has identified as necessary, and none of which DOE identifies as objectionable.

CHANGES IN EXISTING LAW

In compliance with paragraph 12 of rule XXVI of the Standing Rules of the Senate, changes in existing law made by the bill S. 398, as ordered reported, are shown as follows (existing law proposed to be omitted is enclosed in black brackets, new matter is printed in italic, existing law in which no change is proposed is shown in roman):

ENERGY POLICY AND CONSERVATION ACT

* * * * * * *

TITLE III—IMPROVING ENERGY EFFICIENCY

PART B—ENERGY CONSERVATION PROGRAM FOR CONSUMER PRODUCTS OTHER THAN AUTOMOBILES

DEFINITIONS

SEC. 321. For purposes of this part:

(1) The term "consumer product" means any article (other than an automobile, as defined in section 32901(a)(3) of title 49, United States Code) of a type—

* * * * * * * * * *

[(6) The term "energy conservation standard" means—
[(A) a performance standard which prescribes a min-

imum level of energy efficiency or a maximum quantity of energy use, or, in the case of showerheads, faucets, water closets, and urinals, water use, for a covered product, determined in accordance with test procedures prescribed

under section 323; or

[(B) a design requirement for the products specified in paragraphs (6), (7), (8), (10), (15), (16), (17), and (19) of section 322(a); and includes any other requirements which the Secretary may prescribe under section 325(r). Section 123(b)(3)(B)(ii) of P.L. 102-486 stated that section 321(6)(B) should be amended by striking out "325(o)" and inserting in lieu thereof "325(r)"

(6) Energy conservation standard.—

(A) In General.—The term 'energy conservation stand-

ard' means 1 or more performance standards that—

(i) for covered products (excluding clothes washers, dishwashers, showerheads, faucets, water closets, and urinals), prescribe a minimum level of energy efficiency or a maximum quantity of energy use, determined in accordance with test procedures prescribed under section 323;

(ii) for showerheads, faucets, waterclosets, and urinals, prescribe a minimum level of water efficiency or a maximum quantity of water use, determined in accordance with test procedures prescribed under section 323; and

(iii) for clothes washers and dishwashers—

(I) prescribe a minimum level of energy efficiency or a maximum quantity of energy use, determined in accordance with test procedures prescribed under section 323; and

(II) include a minimum level of water efficiency or a maximum quantity of water use, determined

in accordance with those test procedures.

(B) INCLUSIONS.—The term 'energy conservation standard' includes—

(i) 1 or more design requirements, if the requirements were established—

(I) on or before the date of enactment of this subclause:

(II) as part of a direct final rule under section 325(p)(4); or

(III) as part of a final rule published on or after January 1, 2012; and

(ii) any other requirements that the Secretary may

prescribe under section 325(r).

(Ĉ) Exclusion.—The term 'energy conservation standard' does not include a performance standard for a component of a finished covered product, unless regulation of the component is specifically authorized or established pursuant to this title.'; and

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(22) The term "efficiency descriptor" means the ratio of the useful output to the total energy input, determined using the test procedures prescribed under section 323 and expressed for the following products in the following terms:

(A) For furnaces and direct heating equipment, annual

fuel utilization efficiency.

(B) For room air conditioners, energy efficiency ratio.

(C) For central air conditioning and central air conditioning heat pumps, seasonal energy efficiency ratio.

(D) For water heaters, energy factor.

(E) For gas-fired pool heaters, thermal efficiency

(F) For heat pump pool heaters, coefficient of performance of heat pump pool heaters.

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(25) The term "pool heater" means an appliance designed for heating nonpotable water contained at atmospheric pressure, including heating water in swimming pools, spas, hot tubs and similar applications.

(25A) COEFFICIENT OF PERFORMANCE OF HEAT PUMP POOL HEATERS.—The term 'coefficient of performance of heat pump pool heaters' means the ratio of the capacity to power input value obtained at the following rating conditions: 50.0 °F db/44.2 °F wb outdoor air and 80.0 °F entering water temperatures, according to AHRI Standard 1160.

(26) The term "thermal efficiency of gas-fired pool heaters" means a measure of the heat in the water delivered at the heater outlet divided by the heat input of the pool heater as measured under test conditions specified in section 2.8.1 of the

American National Standard for Gas Fired Pool Heaters, Z21.56—1986, or as may be prescribed by the Secretary.

(30)(A) Except as provided in subparagraph (E), the term "fluorescent lamp" means a low pressure mercury electric-discharge source in which a fluorescing coating transforms some of the ultraviolet energy generated by the mercury discharge into light, including only the following:

(i) Any straight-shaped lamp (commonly referred to as 4foot medium bi-pin lamps) with medium bi-pin bases of nominal overall length of 48 inches and rated wattage of

28 or more.

(ii) Any U-shaped lamp (commonly referred to as 2-foot U-shaped lamps) with medium bi-pin bases of nominal overall length between 22 and 25 inches and rated wattage of 28 or more.

(iii) Any rapid start lamp (commonly referred to as 8-foot high output lamps) with recessed double contact bases of nominal overall length of 96 inches and 0.800 nominal amperes, as defined in ANSI C78.1—1978 and related supple-

(iv) Any instant start lamp (commonly referred to as 8foot slimline lamps) with single pin bases of nominal overall length of 96 inches and rated wattage of 52 or more, as defined in ANSI C78.3—1978 (R1984) and related supplement ANSI C78.3a—1985.

(B) The term "general service fluorescent lamp" means fluorescent lamps which can be used to satisfy the majority of fluorescent applications, but does not include any lamp designed and marketed for the following nongeneral lighting applica-

tions:

- (i) Fluorescent lamps designed to promote plant growth.
- (ii) Fluorescent lamps specifically designed for cold temperature installations.

(iii) Colored fluorescent lamps.

(iv) Impact-resistant fluorescent lamps.

(v) Reflectorized or aperture lamps.

(vi) Fluorescent lamps designed for use in reprographic equipment.

(vii) Lamps primarily designed to produce radiation in

the ultra-violet region of the spectrum.

(viii) Lamps with a color rendering index of 87 or great-

(C) Except as provided in subparagraph (E), the term "incandescent lamp" means a lamp in which light is produced by a filament heated to incandescence by an electric current, includ-

ing only the following:

(i) Any lamp (commonly referred to as lower wattage nonreflector general service lamps, including any tungsten-halogen lamp) that has a rated wattage between 30 and 199 watts, has an E26 medium screw base, has a rated voltage or voltage range that lies at least partially within 115 and 130 volts, and is not a reflector lamp.

(ii) Any lamp (commonly referred to as a reflector lamp) which is not colored or designed for rough or vibration service applications, that contains an inner reflective coating on the outer bulb to direct the light, an R, PAR, ER, BR, BPAR, or similar bulb shapes with E26 medium screw bases, a rated voltage or voltage range that lies at least partially within 115 and 130 volts, a diameter which exceeds 2.25 inches, and has a rated wattage that is 40 watts or higher.

(iii) Any general service incandescent lamp (commonly referred to as a high- or higher-wattage lamp) that has a rated wattage above 199 watts (above 205 watts for a high

wattage reflector lamp).

(D) GENERAL SERVICE INCANDESCENT LAMP.—

- (i) IN GENERAL.—The term "general service incandescent lamp" means a standard incandescent or halogen type lamp that—
 - (I) is intended for general service applications;

(II) has a medium screw base;

- (III) has a lumen range of not less than 310 lumens and not more than 2,600 lumens or, in the case of a modified spectrum lamp, not less than 232 lumens and not more than 1,950 lumens; and
- (IV) is capable of being operated at a voltage range at least partially within 110 and 130 volts.

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- (T) APPLIANCE LAMP.—The term "appliance lamp" means any lamp that— $\,$
 - (i) is specifically designed to operate in a household appliance[,] and has a maximum wattage of 40 watts, [and is sold at retail,] including an oven lamp, refrigerator lamp, and vacuum cleaner lamp; and

(ii) when sold at retail is designated and marketed for

the intended application, with—

(I) the designation on the lamp packaging; and

(II) marketing materials that identify the lamp as being for appliance use.

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(66) Pulse-start metal halide ballast.—

(A) IN GENERAL.—The term "pulse-start metal halide ballast" means an electronic or electromagnetic ballast that starts a pulse-start metal halide lamp with high voltage pulses.

(B) STARTING PROCESS.—For the purpose of subparagraph (A)—

(i) lamps shall be started by first providing a high voltage pulse for ionization of the gas to produce a glow discharge; and

(ii) to complete the starting process, power shall be provided by the ballast to sustain the discharge through the glow-to-arc transition.

(67) EER.—The term 'EER' means energy efficiency ratio. (68) HSPF.—The term 'HSPF' means heating seasonal performance factor. (69) GU-24.—The term 'GU-24' means the designation of a lamp socket, based on a coding system by the International Electrotechnical Commission, under which—

(A) 'G' indicates a holder and socket type with 2 or more

projecting contacts, such as pins or posts;

(B) 'U' distinguishes between lamp and holder designs of similar type that are not interchangeable due to electrical or mechanical requirements; and

(C) 24 indicates the distance in millimeters between the

electrical contact posts.

(70) GU-24 ADAPTOR.—

- (A) In General.—The term 'GU-24 Adaptor' means a 1-piece device, pig-tail, wiring harness, or other such socket or base attachment that—
 - (i) connects to a GU-24 socket on 1 end and provides a different type of socket or connection on the other end; and

(ii) does not alter the voltage.

- (B) Exclusion.—The term 'GŬ-24 Adaptor' does not include a fluorescent ballast with a GU-24 base.
- (71) GU-24 BASE LAMP.—'GU-24 base lamp' means a light bulb designed to fit in a GU-24 socket.
- (72) BOTTLE-TYPE WATER DISPENSER.—The term 'bottle-type water dispenser' means a drinking water dispenser that is—

(A) designed for dispensing hot and cold water; and

(B) uses a removable bottle or container as the source of potable water.

(73) Commercial hot food holding cabinet.—

- (A) In General.—The term 'commercial hot food holding cabinet' means a heated, fully enclosed compartment that—
 - (i) is designed to maintain the temperature of hot food that has been cooked in a separate appliance;

(ii) has 1 or more solid or glass doors; and

- (iii) has an interior volume of 8 cubic feet or more.
- (B) Exclusions.—The term 'commercial hot food holding cabinet' does not include—
 - (i) a heated glass merchandising cabinet;

(ii) a drawer warmer;

(iii) a cook-and-hold appliance; or

- (iv) a mobile serving cart with both hot and cold compartments.
- (74) COMPARTMENT BOTTLE-TYPE WATER DISPENSER.—The term 'compartment bottle-type water dispenser' means a drinking water dispenser that—

(A) is designed for dispensing hot and cold water;

- (B) uses a removable bottle or container as the source of potable water; and
- (C) includes a refrigerated compartment with or without provisions for making ice.

(75) PORTABLE ELECTRIC SPA.—

- (A) In General.—The term 'portable electric spa' means a factory-built electric spa or hot tub that—
 - (i) is intended for the immersion of persons in heated water circulated in a closed system; and

- (ii) is not intended to be drained and filled with each
- (B) Inclusions.—The term 'portable electric spa' includes-

(i) a filter;

(ii) a heater (including an electric, solar, or gas heat-

(iii) a pump;

(iv) a control; and

- (v) other equipment, such as a light, a blower, and
- water sanitizing equipment.
 (C) Exclusions.—The term 'portable electric spa' does not include—
 - (i) a permanently installed spa that, once installed, cannot be moved: or
 - (ii) a spa that is specifically designed and exclusively marketed for medical treatment or physical therapy purposes.

(76) Water dispenser' means a factory-made assembly that—

(A) mechanically cools and heats potable water; and

(B) dispenses the cooled or heated water by integral or remote means.

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COVERAGE

SEC. 322. (a) IN GENERAL.—The following consumer products, excluding those consumer products designed solely for use in recreational vehicles and other mobile equipment, are covered products:

- (1) Refrigerators, refrigerator-freezers, and freezers which can be operated by alternating current electricity, excluding-
 - (A) any type designed to be used without doors; and
 - (B) any type which does not include a compressor and condenser unit as an integral part of the cabinet assembly.

(2) Room air conditioners.

- (3) Central air conditioners and central air conditioning heat pumps.
 (4) Water heaters.

 - (5) Furnaces.
 - (6) Dishwashers.
 - (7) Clothes washers.
 - (8) Clothes dryers.
 - (9) Direct heating equipment.
 - (10) Kitchen ranges and ovens.
 - (11) Pool heaters.
 - (12) Television sets.
 - (13) Fluorescent lamp ballasts.
- (14) General service fluorescent lamps, general service incandescent lamps, and incandescent reflector lamps.
 - (15) Showerheads, except safety shower showerheads.
 - (16) Faucets.
 - (17) Water closets.
 - (18) Urinals.

(19) Metal halide lamp fixtures.

(20) Bottle-type water dispensers and compartment bottle-type water dispensers.

(21) Commercial hot food holding cabinets.

(22) Portable electric spas.

[(20)] (23) Any other type of consumer product which the Secretary classifies as a covered product under subsection (b).

* * * * * * *

TEST PROCEDURES

SEC. 323. (a) GENERAL RULE.—All test procedures and related determinations prescribed or made by the Secretary with respect to any covered product (or class thereof) which are in effect on the date of enactment of the National Appliance Energy Conservation Act of 1987 shall remain in effect until the Secretary amends such test procedures and related determinations under subsection (b).

(b) Amended and New Procedures.—

(1) Test procedures.—

(A) AMENDMENT.—At least once every 7 years, the Secretary shall review test procedures for all covered products and—

(i) [amend] publish in the Federal Register amended test procedures with respect to any covered product, if the Secretary determines that amended test procedures would more accurately or fully comply with the requirements of paragraph (3); or

(ii) publish notice in the Federal Register of any de-

termination not to amend a test procedure.

(B) PETITIONS.—

(i) In general.—In the case of any covered product, any person may petition the Secretary to conduct a rulemaking—

(I) to prescribe a test procedure for the covered

product; or

(II) to amend the test procedures applicable to the covered product to more accurately or fully comply with paragraph (3).

(ii) Determination.—The Secretary shall—

(I) not later than 90 days after the date of receipt of the petition, publish the petition in the Federal Register; and

(II) not later than 180 days after the date of re-

ceipt of the petition, grant or deny the petition.'
(iii) BASIS.—The Secretary shall grant a petition if
the Secretary finds that the petition contains evidence
that, assuming no other evidence was considered, provides an adequate basis for determining that an
amended test procedure would more accurately or fully
comply with paragraph (3).

(iv) Effect on other requirements.—The granting of a petition by the Secretary under this subparagraph shall create no presumption with respect to the determination of the Secretary that the proposed test procedure meets the requirements of paragraph (3).

(v) Rulemaking.—

(I) In General.—Except as provided in subclause (II), not later than the end of the 18-month period beginning on the date of granting a petition, the Secretary shall publish an amended test procedure or a determination not to amend the test pro-

(II) Extension.—The Secretary may extend the period described in subclause (I) for 1 additional year.

(III) DIRECT FINAL RULE.—The Secretary may adopt a consensus test procedure in accordance with the direct final rule procedure established under section 325(p)(4).

(C) Test procedures.—The Secretary may, in accordance with the requirements of this subsection, prescribe test procedures for any consumer product classified as a covered

product under section 322(b).

(D) NEW OR AMENDED TEST PROCEDURES.—The Secretary shall direct the National Institute of Standards and Technology to assist in developing new or amended test procedures.

(18) Metal Halide Lamp Ballasts.—Test procedures for metal halide lamp ballasts shall be based on ANSI Standard C82.6 2005, entitled "Ballasts for High Intensity Discharge Lamps—Method of Measurement".

(19) EER AND HSPF TEST PROCEDURES.—

(A) In General.—Subject to subparagraph (B), for purposes of residential central air conditioner and heat pump standards that take effect on or before January 1, 2015—

(i) the EER shall be tested at an outdoor test tem-

perature of 95 degrees Fahrenheit; and

(ii) the HSPF shall be calculated based on Region IV conditions.

(B) REVISIONS.—The Secretary may revise the EER outdoor test temperature and the conditions for HSPF calculations as part of any rulemaking to revise the central air conditioner and heat pump test method.

(20) Bottle-type water dispensers.

(A) In general.—Test procedures for bottle-type water dispensers and compartment bottle-type water dispensers shall be based on the document "Energy Star Program Requirements for Bottled Water Coolers version 1.1" published by the Environmental Protection Agency.

(B) Integral, automatic timers.—A unit with an integral, automatic timer shall not be tested under this paragraph using section 4D of the test criteria (relating to Timer Usage).

(21) Commercial hot food holding cabinets.—

(A) IN GENERAL.—Test procedures for commercial hot food holding cabinets shall be based on the test procedures described in ANSI/ASTM F2140-01 (Test for idle energy rate-dry test).

(B) Interior volume.—Interior volume shall be based under this paragraph on the method demonstrated in the document "Energy Star Program Requirements for Commercial Hot Food Holding Cabinets" of the Environmental Protection Agency, as in effect on August 15, 2003.

(22) PORTABLE ELECTRIC SPAS.—

(A) IN GENERAL.—Test procedures for portable electric spas shall be based on the test method for portable electric spas described in section 1604 of title 20, California Code of Regulations, as amended on December 3, 2008.

(B) Normalized consumption.—Consumption shall be normalized under this paragraph for a water temperature

difference of 37 degrees Fahrenheit.

(C) ANSI TEST PROCEDURE.—If the American National Standards Institute publishes a test procedure for portable electric spas, the Secretary shall revise the procedure established under this paragraph, as determined appropriate by the Secretary.

(23) Refrigerator and freezer test procedure.—

(A) In General.—Not later than 90 days after the date on which the Secretary publishes the final standard rule that was proposed on September 27, 2010, the Secretary shall finalize the interim final test procedure rule proposed on December 16, 2010, with such subsequent modifications to the test procedure or standards as the Secretary determines to be appropriate and consistent with this part.

(B) RULEMĀKING.—

(i) Initiation.—Not later than January 1, 2012, the Secretary shall initiate a rulemaking to amend the test procedure described in subparagraph (A) only to incorporate measured automatic icemaker energy use.

(ii) FINAL RULE.—Not later than December 31, 2012, the Secretary shall publish a final rule regarding the

matter described in clause (i).

(24) Additional home appliance test procedures.—

(A) AMENDED TEST PROCEDURE FOR CLOTHES WASHERS.— Not later than October 1, 2011, the Secretary shall publish a final rule amending the residential clothes washer test procedure.

(B) AMENDED TEST PROCEDURE FOR CLOTHES DRYERS.—

(i) IN GENERAL.—Not later than 180 days after the date of enactment of this paragraph, the Secretary shall publish an amended test procedure for clothes dryers.

(ii) REQUIREMENT.—The amendments to the test procedure shall be limited to modifications requiring that tested dryers are run until the cycle (including cool down) is ended by automatic termination controls, if equipped with those controls.

(c) RESTRICTION ON CERTAIN REPRESENTATIONS.—(1) No manufacturer, distributor, retailer, or private labeler may make any representation—

* * * * * * *

(f) Additional Consumer and Commercial Products.—(1) Not later than 2 years after the date of enactment of this subsection,

the Secretary shall prescribe testing requirements for refrigerated bottled or canned beverage vending machines.

(2) To the maximum extent practicable, the testing requirements prescribed under paragraph (1) shall be based on existing test procedures used in industry.

LABELING

SEC. 324. (a) IN GENERAL.—(1) The Commission shall prescribe labeling rules under this section applicable to all covered products of each of the types specified in paragraphs (1), (2), (4), (6), and (8) through (12) of section 322(a), except to the extent that, with respect to any such type (or class thereof), the Commission determines under the second sentence of subsection (b)(5) that labeling in accordance with this section is not technologically or economically feasible.

(2)(A) The Commission shall prescribe labeling rules under this section applicable to all covered products of each of the types specified in paragraphs (3), (5), and (7) of section 322(a), except to the extent that with respect to any such type (or class thereof), the Commission determines under the second sentence of subsection (b)(5) that labeling in accordance with this section is not technologically or economically feasible or is not likely to assist consumers

in making purchasing decisions.

(3) The Commission may prescribe a labeling rule under this section applicable to covered products of a type specified in paragraph [(19)] (23) of section 322(a) (or a class thereof) if—

(A) the Commission or the Secretary has made a determination with respect to such type (or class thereof) that labeling in accordance with this section will assist purchasers in making purchasing decisions,

(B) the Secretary has prescribed test procedures under sec-

tion 323(b)(1)(B) for such type (or class thereof), and

(C) the Commission determines with respect to such type (or class thereof) that application of labeling rules under this section to such type (or class thereof) is economically and technologically feasible.

(4) Any determination under this subsection shall be published

in the Federal Register.

(5)(A) For covered products described in subsections (u) through (ff) of section 325, after a test procedure has been prescribed under section 323, the Secretary or the Commission, as appropriate, may prescribe, by rule, under this section labeling requirements for the

(B) In the case of products to which TP-1 standards under section 325(y) apply, labeling requirements shall be based on the "Standard for the Labeling of Distribution Transformer Efficiency" prescribed by the National Electrical Manufacturers Association (NEMA TP-3) as in effect on the date of enactment of this para-

(Ĉ) In the case of dehumidifiers covered under section 325(dd),

the Commission shall not require an "Energy Guide" label.

(6) AUTHORITY TO INCLUDE ADDITIONAL PRODUCT CATEGORIES.— The Commission may, by regulation, require labeling or other disclosures in accordance with this subsection for any consumer product not specified in this subsection or section 322 if the Commission determines that labeling for the product is likely to assist consumers in making purchasing decisions.

(b) RULES IN EFFECT; NEW RULES.—(1)(A) Any labeling rule in effect on the date of the enactment of the National Appliance Energy Conservation Act of 1987 shall remain in effect until amended,

by rule, by the Commission.

(B) After the date of the enactment of the National Appliance Energy Conservation Act of 1987 and not later than 30 days after the date on which a proposed test procedure applicable to a covered product of any of the types specified in paragraphs (1) through (13), and paragraphs (15) through [(19)] (23) of section 322(a) (or class thereof) is prescribed under section 323(b), the Commission shall publish a proposed labeling rule applicable to such type (or class thereof).

(2) The Commission shall afford interested persons an opportunity to present written or oral data, views, and comments with respect to the proposed labeling rules published under paragraph (1). The period for such presentations shall not be less than 45

days.

(3) Not earlier than 45 days nor later than 60 days after the date on which test procedures are prescribed under section 323(b) with respect to covered products of any type (or class thereof) specified in paragraphs (1) through (12) of section 322(a), the Commission shall prescribe labeling rules with respect to covered products of such type (or class thereof). Not earlier than 45 days after the date on which test procedures are prescribed under section 323(b) with respect to covered products of a type specified in paragraph [(19)] (23) of section 322(a), the Commission may prescribe labeling rules with respect to covered products of such type (or class thereof).

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(5) The Commission may delay the publication of a proposed labeling rule, or the prescription of a labeling rule, beyond the dates specified in paragraph (1) or (3), if it determines that it cannot publish proposed labeling rules or prescribe labeling rules which meet the requirements of this section on or prior to the date specified in the applicable paragraph and publishes such determination in the Federal Register, together with the reasons therefor. In any such case, it shall publish proposed labeling rules or prescribe labeling rules for covered products of such type (or class thereof) as soon as practicable unless it determines (A) that labeling in accordance with this section is not economically or technically feasible, or (B) in the case of a type specified in paragraphs (3), (5), and (7) of section 322(a), that labeling in accordance with this section is not likely to assist consumers in purchasing decisions. Any such determination shall be published in the Federal Register, together with the reasons therefor. This paragraph shall not apply to the prescription of a labeling rule with respect to covered products of a type specified in paragraph [(19)] (23) of section 322(a).

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(g) OTHER AUTHORITY OF THE COMMISSION.—Until such time as labeling rules under this section take effect with respect to a type or class of covered product, this section shall not affect any author-

ity of the Commission under the Federal Trade Commission Act to require labeling with respect to energy consumption of such type or class of covered product.

ENERGY STAR PROGRAM

SEC. 324A. (a) IN GENERAL.—There is established within the Department of Energy and the Environmental Protection Agency a voluntary program to identify and promote energy-efficient products and buildings in order to reduce energy consumption, improve energy security, and reduce pollution through voluntary labeling of, or other forms of communication about, products and buildings that meet the highest energy conservation standards.

- (d) DEADLINES.—The Secretary shall establish new qualifying levels-
 - (1) not later than January 1, 2006, for clothes washers and dishwashers, effective beginning January 1, 2007; and (2) not later than January 1, 2008, for clothes washers, effec-

tive beginning July 1, 2009.

(e) Credit for Smart Appliances.—Not later than 180 days after the date of enactment of this subsection, after soliciting comments pursuant to subsection(c)(5), the Administrator of the Environmental Protection Agency, in cooperation with the Secretary, shall determine whether to update the Energy Star criteria for residential refrigerators, refrigerator-freezers, freezers, dishwashers, clothes washers, clothes dryers, and room air conditioners to incorporate smart grid and demand response features.

SEC. 324B. VIDEO GAME CONSOLE ENERGY EFFICIENCY STUDY.

(a) Initial Study.—

(1) IN GENERAL.—Not later than 1 year after the date of enactment of this section, the Secretary shall conduct a study of—

(A) video game console energy use; and

(B) opportunities for energy savings regarding that energy use.

(2) INCLUSIONS.—The study under paragraph (1) shall include an assessment of all power-consuming modes and media

playback modes of videogame consoles.

(b) ACTION ON COMPLETION.—On completion of the initial study under subsection (a), the Secretary shall determine, by regulation, using the criteria and procedures described in section 325(n)(2), whether to initiate a process for establishing minimum energy efficiency standards for video game console energy use.

(c) FOLLOW-UP STUDY.—If the Secretary determines under subsection (b) that standards should not be established, the Secretary shall conduct a follow-up study in accordance with subsection (a) by

not later than 3 years after the date of the determination.

ENERGY CONSERVATION STANDARDS

Sec. 325. (a) Purposes.—The purposes of this section are to—

(1) provide Federal energy conservation standards applicable

to covered products; and

(2) authorize the Secretary to prescribe amended or new energy conservation standards for each type (or class) of covered product.

(b) STANDARDS FOR REFRIGERATORS, REFRIGERATOR-FREEZERS, AND FREEZERS.—(1) The following is the maximum energy use allowed in kilowatt hours per year for the following products (other than those described in paragraph (2)) manufactured on or after January 1, 1990:

Energy Standards Equations

Refrigerators and Refrigerator-Freezers with manual defrost	16.3AV+316
Refrigerator-Freezers—partial automatic defrost	21.8AV+429
Refrigerator-Freezers—automatic defrost with:	
Top mounted freezer without ice	23.5AV+471
Side mounted freezer without ice	27.7AV+488
Bottom mounted freezer without ice	27.7AV+488
Top mounted freezer with through the door ice service	26.4AV+535
Side mounted freezer with through the door ice	30.9AV+547
Upright Freezers with:	
Manual defrost	10.9AV+422
Automatic defrost	16.0AV+623
Chest Freezers and all other freezers	14.8AV+223

(2) The standards described in paragraph (1) do not apply to refrigerators and refrigerator-freezers with total refrigerated volume exceeding 39 cubic feet or freezers with total refrigerated volume exceeding 30 cubic feet.

* * * * * * *

[(4) REFRIGERATORS AND FREEZERS MANUFACTURED ON OR AFTER JANUARY 1, 2014.—

- [(A) In GENERAL.—Not later than December 31, 2010, the Secretary shall publish a final rule determining whether to amend the standards in effect for refrigerators, refrigerator-freezers, and freezers manufactured on or after January 1, 2014.
- [(B) AMENDED STANDARDS.—The final rule shall contain any amended standards.]
- (4) Refrigerators, refrigerator-freezers, and freezers manufactured as of January 1, 2014.—
 - (A) DEFINITION OF BUILT-IN PRODUCT CLASS.—In this paragraph, the term built-in product class' means a refrigerator, freezer, or refrigerator with a freezer unit that—
 - (i) is 7.75 cubic feet or greater in total volume and 24 inches or less in cabinet depth (not including doors, handles, and custom front panels);
 - (ii) is designed to be totally encased by cabinetry or panels attached during installation;
 - (iii) is designed to accept a custom front panel or to be equipped with an integral factory-finished face;
 - (iv) is designed to be securely fastened to adjacent cabinetry, walls, or floors; and
 - (v) has 2 or more sides that are not—
 - (I) fully finished; and
 - (II) intended to be visible after installation.
 - (B) MAXIMUM ENERGY USE.—
 - (i) In General.—Based on the test procedure in effect on July 9, 2010, the maximum energy use allowed in kilowatt hours per year for each product described in the table con-

tained in clause (ii) (other than refrigerators and refrigerator-freezers with total refrigerated volume exceeding 39 cubic feet and freezers with total refrigerated volume exceeding 30 cubic feet) that is manufactured on or after January 1, 2014, is specified in the table contained in that clause.

(ii) STANDARDS EQUATIONS.—The allowed maximum energy use referred to in clause (i) is as follows:

"Standards Equations

Product Description:	
Automatic Defrost Refrigerator-Freezers:	
Top Freezer w/o TTD ice	7.35 AV+ 207.0
Top Freezer w/ TTD ice	7.65 AV+ 267.0
Side Freezer w/o TTD ice	3.68 AV+ 380.6
Side Freezer w/ TTD ice	7.58 AV+ 304.5
Bottom Freezer w/o TTD ice	3.68 AV+ 367.2
Bottom Freezer w/ TTD ice	4.0 AV+ 431.2
Manual & Partial Automatic Refrigerator-Freezers:	4.0 /10 / 401.2
Manual Defrost	7.06 AV+ 198.7
Partial Automatic	7.06 AV+ 198.7
All Refrigerators:	7.00 717 100.7
Manual Defrost	7.06 AV+ 198.7
Automatic Defrost	7.35 AV+ 207.0
All Freezers:	7.55 AVT 207.0
Upright with manual defrost	5.66 AV+ 193.7
Upright with automatic defrost	8.70 AV+ 228.3
Chest with manual defrost	7.41 AV+ 107.8
Chest with automatic defrost	10.33 AV+ 148.1
Automatic Defrost Refrigerator-Freezers—Compact Size:	10.33 AVT 140.1
Top Freezer and Bottom Freezer	10.80 AV+ 301.8
Side Freezer	6.08 AV+ 400.8
Manual & Partial Automatic Refrigerator-Freezers—Compact Size:	0.00 AV+ 400.8
Manual Defrost	8.03 AV+ 224.3
Partial Automatic	5.25 AV+ 298.5
All Refrigerators—Compact Size:	3.23 AV+ 290.3
Manual defrost	8.03 AV+ 224.3
	8.03 AV+ 224.3 9.53 AV+ 266.3
Automatic defrost	9.33 AV+ 200.3
All Freezers—Compact Size:	9 90 41/ 225 7
Upright with manual defrost	8.80 AV+ 225.7
Upright with automatic defrost	10.26 AV+ 351.9
Chest	9.41AV+ 136.8
Automatic Defrost Refrigerator-Freezers—Built-ins:	7.04.41/ 000.0
Top Freezer w/o TTD ice	7.84 AV+ 220.8
Side Freezer w/o TTD ice	3.93 AV+ 406.0
Side Freezer w/ TTD ice	8.08 AV+ 324.8
Bottom Freezer w/o TTD ice	3.91 AV+ 390.2
Bottom Freezer w/ TTD ice	4.25 AV+ 458.2
All Refrigerators—Built-ins:	704 41/ 0000
Automatic Defrost	7.84 AV+ 220.8
All Freezers—Built-ins:	
Upright with automatic defrost	9.32 AV+ 244.6

(iii) FINAL RULES.—

(I) In GENERAL.—Except as provided in subclause (II), after the date of publication of each test procedure change made pursuant to section 323(b)(23), in accordance with the procedures described in section 323(e)(2),

the Secretary shall publish final rules to amend the standards specified in the table contained in clause (ii).

(II) Exception.—The standards amendment made pursuant to the test procedure change required under section 323(b)(23)(B) shall be based on the difference between-

(aa) the average measured automatic ice maker energy use of a representative sample for each product class; and

(bb) the value assumed by the Department of Energy for icemaker energy use in the test procedure published pursuant to section 323(b)(23)(Å).

(III) APPLICABILITY.—Section 323(e)(3) shall not

apply to the rules described in this clause.

(iv) Final Rule.—The Secretary shall publish any final rule required by clause (iii) by not later than the later of the date that is 180 days after-

(I) the date of enactment of this clause; or

(II) the date of publication of a final rule to amend the test procedure described in section 323(b)(23).

(v) NEW PRODUCT CLASSES.—The Secretary may establish 1 or more new product classes as part of the final amended standard adopted pursuant to the test procedure change required under section 323(b)(23)(B) if the 1 or more new product classes are needed to distinguish among products with automatic icemakers.

(vi) Effective dates of standards.—

(I) Standards amendment for first revised test PROCEDURE.—A standards amendment 1 adopted pursuant to a test procedure change required under section 323(b)(23)(A) shall apply to any product manufactured

as of January 1, 2014.

(II) STANDARDS AMENDMENT AFTER REVISED TEST PROCEDURE FOR ICEMAKER ENERGY.—An amendment adopted pursuant to a test procedure change required under section 323(b)(23)(B) shall apply to any product manufactured as of the date that is 3 years after the date of publication of the final rule amending the standards.

(vii) Slope and intercept adjustments.-

(I) In General.—With respect to refrigerators, freezers, and refrigerator-freezers, the Secretary may, by rule, adjust the slope and intercept of the equations specified in the table contained in clause (ii)-

(aa) based on the energy use of typical products

of various sizes in a product class; and

(bb) if the average energy use for each of the classes is the same under the new equations as under the equations specified in the table contained in clause (ii).

(II) Deadline.—If the Secretary adjusts the slope and intercept of an equation described in subclause (I), the Secretary shall publish the final rule containing the adjustment by not later than July 1, 2011.

(viii) EFFECT.—A final rule published under clause (iii) pursuant to the test procedure change required under section 323(b)(23)(B) or pursuant to clause (iv) shall not be considered to be an amendment to the standard for purposes of section 325(m).

(c) STANDARDS FOR ROOM AIR CONDITIONERS.—(1) The energy efficiency ratio of room air conditioners shall be not less than the following for products manufactured on or after January 1, 1990:

Product Class	Ratio
Without Reverse Cycle and With Louvered Sides:	
Less than 6,000 Btu	8.0
6,000 to 7,999 Btu	8.5
8,000 to 13,999 Btu	9.0
14,000 to 19,999 Btu	8.8
20,000 and more Btu	8.2
Without Reverse Cycle and Without Louvered Sides:	
Less than 6,000 Btu	8.0
6,000 to 7,999 Btu	8.5
8,000 to 13,999 Btu	8.5
14,000 to 19,999 Btu	8.5
20,000 and more Btu	8.2
With Reverse Cycle and With Louvered Sides	8.5
With Reverse Cycle, Without Louvered Sides	8.0

(2)(A) The Secretary shall publish a final rule no later than January 1, 1992, to determine if the standards established under paragraph (1) should be amended. Such rule shall contain such amendment, if any, and provide that the amendment shall apply to products manufactured on or after January 1, 1995.

(B) After January 1, 1992, the Secretary shall publish a final rule no later than five years after the date of publication of a previous final rule. The Secretary shall determine in such rule whether to amend the standards in effect for room air conditioners.

- (C) Any amendment prescribed under subparagraph (B) shall apply to products manufactured after a date which is five years after—
 - (i) the effective date of the previous amendment; or
 - (ii) if the previous final rule did not amend the standards, the earliest date by which a previous amendment could have been effective:
 - except that in no case may any amended standard apply to products manufactured within three years after publication of the final rule establishing such amended standard.
- (3) Minimum energy efficiency ratio of room air conditioners manufactured on or after june 1, 2014.—
 - (A) In General.—Based on the test procedure in effect on July 9, 2010, the minimum energy efficiency ratios of room air conditioners manufactured on or after June 1, 2014, shall not be less than that specified in the table contained in subparagraph (B).
 - (B) MINIMUM ENERGY EFFICIENCY RATIOS.—The minimum energy efficiency ratios referred to in subparagraph (A) are as follows:

"Product Description	Minimum EER
Without Reverse Cycle w/Louvers:	
<6,000 Btu/h	11.2
6,000 to 7,999 Btu/h	11.2
8,000–13,999 Btu/h	11.0
14,000 to 19,999 Btu/h	10.8
20,000–27,999 Btu/h	9.4
≥28,000 Btu/h	9.0
Without Reverse Cycle w/o Louvers:	
<6,000 Btu/h	10.2
6,000 to 7,999 Btu/h	10.2
8,000–10,999 Btu/h	9.7
11,000–13,999 Btu/h	9.6
14,000 to 19,999 Btu/h	9.4
≥20,000 Btu/h	9.4
With Reverse Cycle:	
<20,000 w/Louvers Btu/h	9.9
≥20,000 w/Louvers Btu/h	9.4
<14,000 w/o Louvers Btu/h	9.4
≥14,000 w/o Louvers Btu/h	8.8
Casement:	
Casement Only	9.6
Casement-Slider	10.5

(C) FINAL RULE.—

(i) IN GENERAL.—Not later than July 1, 2011, pursuant to the test procedure adopted by the Secretary on January 6, 2011, the Secretary shall amend the standards specified in the table contained in subparagraph (B) in accordance with the procedures described in section 323 (e)(2).

(ii) Standby and off mode energy consumption.—

(I) In General.—The Secretary shall integrate standby and off mode energy consumption into the amended energy efficiency ratios standards required under clause (i).

(II) REQUIREMENTS.—The amended standards described in subclause (I) shall reflect the levels of standby and off mode energy consumption that meet the criteria described in section 325(o).

(iii) Applicability.—

- (I) AMENDMENT OF STANDARD.—Section 323(e)(3) shall not apply to the amended standards described in clause (i).
- (II) AMENDED STANDARDS.—The amended standards required by this subparagraph shall apply to products manufactured on or after June 1, 2014.

* * * * * * *

- (d) STANDARDS FOR CENTRAL AIR CONDITIONERS AND HEAT PUMPS.—(1) The seasonal energy efficiency ratio of central air conditioners and central air conditioning heat pumps shall be not less than the following:
 - (A) Split Systems: 10.0 for products manufactured on or after January 1, 1992.
 - (B) Single Package Systems: 9.7 for products manufactured on or after January 1, 1993.
- (2) The heating seasonal performance factor of central air conditioning heat pumps shall be not less than the following:
 - (A) Split Systems: 6.8 for products manufactured on or after January 1, 1992.

(B) Single Package Systems: 6.6 for products manufactured on or after January 1, 1993.

* * * * * * * *

- (4) Central air conditioners and heat pumps (except through-the-wall central air conditioners, through-the-wall central air conditioning heat pumps, and small duct, high velocity systems) manufactured on or after January 1, 2015.—
 - (A) Base national standards.—
 - (i) SEASONAL ENERGY EFFICIENCY RATIO.—The seasonal energy efficiency ratio of central air conditioners and central air conditioning heat pumps manufactured on or after January 1, 2015, shall than the following:

(I) Split Systems: 13 for central air conditioners and

14 for heat pumps.

(II) Single Package Systems: 14.

(ii) Heating seasonal performance factor of central air conditioning heat pumps manufactured on or after January 1, 2015, shall than the following:

(I) Split Systems: 8.2.

(II) Single Package Systems: 8.0.

(B) REGIONAL STANDARDS.—

(i) SEASONAL ENERGY EFFICIENCY RATIO.—The seasonal energy efficiency ratio of central air conditioners and central air conditioning heat pumps manufactured on or after January 1, 2015, and installed in States having historical average annual, population weighted, heating degree days less than 5,000 (specifically the States of Alabama, Arizona, Arkansas, California, Delaware, Florida, Georgia, Hawaii, Kentucky, Louisiana, Maryland, Mississippi, Nevada, New Mexico, North Carolina, Oklahoma, South Carolina, Tennessee, Texas, and Virginia) or in the District of Columbia, the Commonwealth of Puerto Rico, or any other territory or possession of the United States shall not be less than the following:

(I) Split Systems: 14 for central air conditioners and

14 for heat pumps.

(II) Single Package Systems: 14.

(ii) ENERGY EFFICIENCY RATIO.—The energy efficiency ratio of central air conditioners (not including heat pumps) manufactured on or after January 1, 2015, and installed in the State of Arizona, California, New Mexico, or Nevada shall not be less than the following:

(I) Split Systems: 12.2 for split systems having a rated cooling capacity less than 45,000 BTU per hour and 11.7 for products having a rated cooling capacity

equal to or greater than 45,000 BTU per hour.

(II) Single Package Systems: 11.0.

(iii) APPLICATION OF SUBSECTION (O)(6).—Subsection (o)(6) shall apply to the regional standards set forth in this subparagraph.

(C) AMENDMENT OF STANDARDS.—

(i) IN GENERAL.—Not later than January 1, 2017, the Secretary shall publish a final rule to determine whether the standards in effect for central air conditioners and central air conditioning heat pumps should be amended.

(ii) APPLICATION.—The rule shall provide that any amendments shall apply to products manufactured on or after January 1, 2022.

(D) Consideration of additional performance standards

OR EFFICIENCY CRITERIA.

- (i) FORUM.—Not later than 4 years in advance of the expected publication date of a final rule for central air conditioners and heat pumps under subparagraph (C), the Secretary shall convene and facilitate a forum for interested persons that are fairly representative of relevant points of view (including representatives of manufacturers of the covered product, States, and efficiency advocates), as determined by the Secretary, to consider adding additional performance standards or efficiency criteria in the forthcoming
- (ii) RECOMMENDATION.—If, within 1 year of the initial convening of such a forum, the Secretary receives a recommendation submitted jointly by such representative interested persons to add 1 or more performance standards or efficiency criteria, the Secretary shall incorporate the performance standards or efficiency criteria in the rulemaking process, and, if justified under the criteria established in this section, incorporate such performance standards or efficiency criteria in the revised standard.

(iii) NO RECOMMENDATION.—If no such joint recommendation is made within 1 year of the initial convening of such a forum, the Secretary may add additional performance standards or efficiency criteria if the Secretary finds that the benefits substantially exceed the burdens of

the action.

(E) NEW CONSTRUCTION LEVELS.—

(i) IN GENERAL.—As part of any final rule concerning central air conditioner and heat pump standards published after June 1, 2013, the Secretary shall determine if the building code levels specified in section 327(f)(3)(C) should be amended subject to meeting the criteria of subsection (o) when applied specifically to new construction.

(ii) EFFECTIVE DATE.—Any amended levels shall not take effect before January 1, 2018.

(iii) AMENDED LEVELS.—The final rule shall contain the

amended levels, if any.

(5) Standards for through-the-wall central air condi-TIONERS, THROUGH-THE-WALL CENTRAL AIR CONDITIONING HEAT PUMPS, AND SMALL DUCT, HIGH VELOCITY SYSTEMS.—

(A) DEFINITIONS.—In this paragraph:

- (i) Small duct, high velocity system.—The term 'small duct, high velocity system' means a heating and cooling product that contains a blower and indoor coil combination that-
 - (I) is designed for, and produces, at least 1.2 inches of external static pressure when operated at the certified air volume rate of 220-350 CFM per rated ton of cooling; and

(II) when applied in the field, uses high velocity room outlets generally greater than 1,000 fpm that

have less than 6.0 square inches of free area.

(ii) Through-the-wall central air conditioner; Through-the-wall central air conditioner' and 'through-the-wall central air conditioner' and 'through-the-wall central air conditioning heat pump' mean a central air conditioner or heat pump, respectively, that is designed to be installed totally or partially within a fixed-size opening in an exterior wall, and—

(I) is not weatherized;

(II) is clearly and permanently marked for installation only through an exterior wall;

(III) has a rated cooling capacity no greater than 30,000 Btu/hr;

(IV) exchanges all of its outdoor air across a single

surface of the equipment cabinet; and

(V) has a combined outdoor air exchange area of less than 800 square inches (split systems) or less than 1,210 square inches (single packaged systems) as measured on the surface area described in subclause (IV).

(iii) REVISION.—The Secretary may revise the definitions contained in this subparagraph through publication of a

final rule.

(B) SMALL-DUCT HIGH-VELOCITY SYSTEMS.—

(i) SEASONAL ENERGY EFFICIENCY RATIO.—The seasonal energy efficiency ratio for small-duct high-velocity systems shall be not less than 11.00 for products manufactured on or after January 23, 2006.

(ii) Heating seasonal performance factor for small-duct high-velocity systems shall be not less than 6.8 for products manu-

factured on or after January 23, 2006.

(C) RULEMAKING.—

(i) In general.—Not later than June 30, 2011, the Secretary shall publish a final rule to determine whether standards for through-the-wall central air conditioners, through-the-wall central air conditioning heat pumps and small duct, high velocity systems should be amended.

(ii) APPLICATION.—The rule shall provide that any new or amended standard shall apply to products manufac-

tured on or after June 30, 2016.

- (e) STANDARDS FOR WATER HEATERS; POOL HEATERS; DIRECT HEATING EQUIPMENT.—(1) The energy factor of water heaters shall be not less than the following for products manufactured on or after January 1, 1990:
 - (A) Gas Water Heater: .62— $(.0019 \times Rated Storage Volume in gallons)$

(B) Oil Water Heater: .59—($.0019 \times \text{Rated Storage Volume in gallons}$)

(C) Electric Water Heater: .95—($.00132 \times Rated Storage Volume in gallons)$

(2) The thermal efficiency of pool heaters

(2) POOL HEATERS.—

(A) Gas-fired pool heaters manufactured on or after January 1, 1990,

shall not be less than 78 percent.

(B) HEAT PUMP POOL HEATERS.—Heat pump pool heaters manufactured on or after the date of enactment of this subparagraph shall have a minimum coefficient of performance of 4.0.

* * * * * * *

(4)(A) The Secretary shall publish final rules no later than January 1, 1992, to determine whether the standards established by paragraph (1), (2), or (3) for water heaters, pool heaters, and direct heating equipment should be amended. Such rule shall provide that any amendment shall apply to products manufactured on or after January 1, 1995.

(B) The Secretary shall publish a final rule no later than January 1, 2000, to determine whether standards in effect for such products should be amended. Such rule shall provide that any such amendment shall apply to products manufactured on or after January

ary 1, 2005.

(5) Uniform efficiency descriptor for covered water heaters.—

(A) DEFINITIONS.—In this paragraph:

(i) COVERED WATER HEATER.—The term covered water heater' means—

(I) a water heater; and

(II) a storage water heater, instantaneous water heater, and unfired water storage tank (as defined in section 340).

(ii) Final rule rule means the final

rule published under this paragraph.

- (B) Publication of final rule.—Not later than 180 days after the date of enactment of this paragraph, the Secretary shall publish a final rule that establishes a uniform efficiency descriptor and accompanying test methods for covered water heaters.
- (C) Purpose.—The purpose of the final rule shall be to replace with a uniform efficiency descriptor—

(i) the energy factor descriptor for water heaters estab-

lished under this subsection; and

- (ii) the thermal efficiency and standby loss descriptors for storage water heaters, instantaneous water heaters, and unfired water storage tanks established under section 342(a)(5).
- (D) EFFECT OF FINAL RULE.—(i) IN GENERAL.—Notwithstanding any other provision of this title, effective beginning on the effective date of the final rule, the efficiency standard for covered water heaters shall be denominated according to the efficiency descriptor established by the final rule.

(ii) EFFECTIVE DATE.—The final rule shall take effect 1 year after the date of publication of the final rule under subpara-

graph (B).

(E) CONVERSION FACTOR.—

(i) In General.—The Secretary shall develop a mathematical conversion factor for converting the measurement of efficiency for covered water heaters from the test procedures

in effect on the date of enactment of this paragraph to the new energy descriptor established under the final rule.

(ii) APPLICATION.—The conversion factor shall apply to models of covered water heaters affected by the final rule and tested prior to the effective date of the final rule.

(iii) Effect on efficiency requirements.—The conversion factor shall not affect the minimum efficiency requirements for covered water heaters otherwise established

under this title.

- (iv) USE.—During the period described in clause (v), a manufacturer may apply the conversion factor established by the Secretary to rerate existing models of covered water heaters that are in existence prior to the effective date of the rule described in clause (v)(II) to comply with the new efficiency descriptor.
- (v) Period.—Subclause (E) shall apply during the period.—
 - (I) beginning on the date of publication of the conversion factor in the Federal Register; and

(II) ending on April 16, 2015.

(F) EXCLUSIONS.—The final rule may exclude a specific category of covered water heaters from the uniform efficiency descriptor established under this paragraph if the Secretary determines that the category of water heaters—

(i) does not have a residential use and can be clearly de-

scribed in the final rule; and

- (ii) are effectively rated using the thermal efficiency and standby loss descriptors applied (on the date of enactment of this paragraph) to the category under section 342(a)(5).
- (G) Options.—The descriptor set by the final rule may be—
 (i) a revised version of the energy factor descriptor in use on the date of enactment of this paragraph;
 - (ii) the thermal efficiency and standby loss descriptors in use on that date;
 - (iii) a revised version of the thermal efficiency and standby loss descriptors;

(iv) a hybrid of descriptors; or

(v) a new approach.

(H) APPLICATION.—The efficiency descriptor and accompanying test method established under the final rule shall apply, to the maximum extent practicable, to all water heating technologies in use on the date of enactment of this paragraph and to future water heating technologies.

(I) Participation.—The Secretary shall invite interested stakeholders to participate in the rulemaking process used to es-

tablish the final rule.

- (J) Testing of alternative descriptors.—In establishing the final rule, the Secretary shall contract with the National Institute of Standards and Technology, as necessary, to conduct testing and simulation of alternative descriptors identified for consideration.
- (K) EXISTING COVERED WATER HEATERS.—A covered water heater shall be considered to comply with the final rule on and after the effective date of the final rule and with any revised la-

beling requirements established by the Federal Trade Commission to carry out the final rule if the covered water heater

(i) was manufactured prior to the effective date of the final rule; and

(ii) complied with the efficiency standards and labeling requirements in effect prior to the final rule.

(f) STANDARDS FOR FURNACES AND BOILERS.—(1) Furnaces (other than furnaces designed solely for installation in mobile homes) manufactured on or after January 1, 1992, shall have an annual fuel utilization efficiency of not less than 78 percent, except that—

(A) boilers (other than gas steam boilers) shall have an annual fuel utilization efficiency of not less than 80 percent and gas steam boilers shall have an annual fuel utilization effi-

ciency of not less than 75 percent; and

(B) the Secretary shall prescribe a final rule not later than January 1, 1989, establishing an energy conservation standard-

(i) which is for furnaces (other than furnaces designed solely for installation in mobile homes) having an input of less than 45,000 Btu per hour and manufactured on or after January 1, 1992;

(ii) which provides that the annual fuel utilization efficiency of such furnaces shall be a specific percent which is not less than 71 percent and not more than 78 percent;

and

(iii) which the Secretary determines is not likely to result in a significant shift from gas heating to electric resistance heating with respect to either residential construction or furnace replacement.

(2) Furnaces which are designed solely for installation in mobile homes and which are manufactured on or after September 1, 1990, shall have an annual fuel utilization efficiency of not less than 75 percent.

(5) Non-Weatherized Furnaces (including Mobile Home Fur-NACES, BUT NOT INCLUDING BOILERS) MANUFACTURED ON OR AFTER May 1, 2013, and Weatherized Furnaces Manufactured on or AFTER JANUARY 1, 2015.

(A) Base national standards.—

(i) Non-weatherized furnaces.—The annual fuel utilization efficiency of non-weatherized furnaces manufactured on or after May 1, 2013, shall be not less than the following:

(I) Gas furnaces, a level determined by the Secretary in a final rule published not later than June 30, 2011.

(II) Oil furnaces, 83 percent.

(ii) WEATHERIZED FURNACES.—The annual fuel utilization efficiency of weatherized gas furnaces manufactured on or after January 1, 2015, shall be not less than 81 percent. (B) REGIONAL STANDARD.

(i) Annual fuel utilization efficiency.—Not later than June 30, 2011, the Secretary shall(I) publish a final rule determining whether to establish a standard for the annual fuel utilization efficiency of non-weatherized gas furnaces manufactured on or after May 1, 2013, and installed in States having historical average annual, population weighted, heating degree days equal to or greater than 5,000 (specifically the States of Alaska, Colorado, Connecticut, Idaho, Illinois, Indiana, Iowa, Kansas, Maine, Massachusetts, Michigan, Minnesota, Missouri, Montana, Nebraska, New Hampshire, New Jersey, New York, North Dakota, Ohio, Oregon, Pennsylvania, Rhode Island, South Dakota, Utah, Vermont, Washington, West Virginia, Wisconsin, and Wyoming); and

(II) include in the final rule described in subclause (I) any regional standard established under this sub-

paragraph.

(ii) APPLICATION OF SUBSECTION (O)(6).—Subsection (o)(6) shall apply to any regional standard established under this subparagraph.

(C) AMENDMENT OF STANDARDS.—

(i) Non-weatherized furnaces.—

(I) IN GENERAL.—Not later than January 1, 2014, the Secretary shall publish a final rule to determine whether the standards in effect for non-weatherized furnaces should be amended.

(II) APPLICATION.—The rule shall provide that any amendments shall apply to products manufactured on or after January 1, 2019.

(ii) WEATHERIZED FURNACES.—

(I) IN GENERAL.—Not later than January 1, 2017, the Secretary shall publish a final rule to determine whether the standard in effect for weatherized furnaces should be amended.

(II) APPLICATION.—The rule shall provide that any amendments shall apply to products manufactured on or after January 1, 2022.

(D) NEW CONSTRUCTION LEVELS.—

(i) In general.—

(I) FINAL RULE PUBLISHED AFTER JANUARY 1, 2011.—As part of any final rule concerning furnace standards published after January 1, 2011, the Secretary shall establish the building code levels referred to in subclauses (I)(aa), (II)(aa), and (III)(aa) of section 327(f)(3)(C)(i) subject to meeting the criteria of subsection (o) when applied specifically to new construction.

(II) FINAL RULE PUBLISHED AFTER JUNE 1, 2013.—As part of any final rule concerning furnace standards published after June 1, 2013, the Secretary shall determine if the building code levels specified in or pursuant to section 327(f)(3)(C) should be amended subject to meeting the criteria of subsection (o) when applied specifically to new construction.

(ii) Effective date.—Any amended levels shall not take effect before January 1, 2018.

(iii) AMENDED LEVELS.—The final rule shall contain the

amended levels, if any.

(g) STANDARDS FOR DISHWASHERS; CLOTHES WASHERS; CLOTHES DRYERS, FLUORESCENT LAMP BALLASTS.—(1) Dishwashers manufactured on or after January 1, 1988, shall be equipped with an option to dry without heat.

(2) All rinse cycles of clothes washers shall include an unheated water option, but may have a heated water rinse option, for prod-

ucts manufactured on or after January 1, 1988.

(3) Gas clothes dryers shall not be equipped with a constant burning pilot for products manufactured on or after January 1, 1988.

(4)(A) The Secretary shall publish final rules no later than January 1, 1990, to determine if the standards established under this subsection for products described in paragraphs (1), (2), and (3) should be amended. Such rules shall provide that any amendment shall apply to products the manufacture of which is completed on or after January 1, 1993.

* * * * * * *

(C) Any such amendment shall apply to products manufactured after a date which is five years after—

(i) the effective date of the previous amendment; or

(ii) if the previous final rule did not amend the standard, the earliest date by which a previous amendment could have been in effect; except that in no case may any amended standard apply to products manufactured within 3 years after publication of the final rule establishing such standard.

(D) MINIMUM ENERGY FACTORS FOR CLOTHES DRYERS.—

(i) IN GENERAL.—Based on the test procedure in effect as of July 9, 2010, clothes dryers manufactured on or after January 1, 2015, shall comply with the minimum energy factors specified in the table contained in clause (ii).

(ii) NEW STANDARDS.—The minimum energy factors referred

to in clause (i) are as follows:

"Product Description	EF
Vented Electric Standard Vented Electric Compact 120V Vented Electric Compact 240V Vented Gas Vent-Less Electric Compact 240V Vent-Less Electric Compination Washer/Dryer	3.17. 3.29. 3.05. 2.81. 2.37. 1.95.

(iii) FINAL RULE.—

(I) REQUIREMENTS.—

(aa) IN GENERAL.—The final rule to amend the clothes dryer test procedure adopted pursuant to section 323(b)(24)(B) shall amend the energy factors standards specified in the table contained in clause (ii) in accordance with the procedures described in section 323(e)(2).

(bb) Representative sample of compliant products, the Secretary shall select a sample of minimally compliant dryers that automatically terminate the drying cycle at not less than 4 percent remaining moisture content.

(II) STANDBY AND OFF MODE ENERGY CONSUMPTION.—

(aa) INTEGRATION.—The Secretary shall integrate standby and off mode energy consumption into the amended standards required under subclause (I).

(bb) REQUIREMENTS.—The amended standards described in item (aa) shall reflect levels of standby and off mode energy consumption that meet the criteria described in section 325(o).

(III) APPLICABILITY.—

(aa) AMENDMENT OF STANDARD.—Section 323(e)(3) shall not apply to the amended standards described in subclause 5(1).

(bb) AMENDED STANDARDS.—The amended standards required by this clause shall apply to products manufactured on or after january 1, 2015.

(iv) Other Standards.—Any dryer energy conservation standard that takes effect after the date of enactment of this subparagraph but before the amended standard required by this subparagraph shall not apply.

(5) Except as provided in paragraph (6), each fluorescent lamp ballast—

(A)(')

(A)(i) manufactured on or after January 1, 1990;

(ii) sold by the manufacturer on or after April 1, 1990; or

(iii) incorporated into a luminaire by a luminaire manufacturer on or after April 1, 1991; and

(B) designed—

- (i) to operate at nominal input voltages of 120 or 277 volts;
- (ii) to operate with an input current frequency of 60 Hertz; and
- (iii) for use in connection with an F40T12, F96T12, or F96T12HO lamps;

shall have a power factor of 0.90 or greater and shall have a ballast efficacy factor not less than the following:

Application for operation of	Ballast input voltage	Total nominal lamp watts	Ballast efficacy factor
One F40T12 lamp	120	40	1.805
	277	40	1.805
Two F40T12 lamps	120	80	1.060
·	277	80	1.050
Two F96T12 lamps	120	150	0.570
·	277	150	0.570
Two F96T12HO lamps	120	220	0.390
·	277	220	0.390

(6) The standards described in paragraph (5) do not apply to (A) a ballast which is designed for dimming or for use in ambient temperatures of 0 F or less, or (B) a ballast which has a power factor of less than 0.90 and is designed and labeled for use only in residential building applications.

(7)(A) The Secretary shall publish a final rule no later than January 1, 1992, to determine if the standards established under paragraph (5) should be amended, including whether such standards should be amended so that they would be applicable to ballasts described in paragraph (6) and other fluorescent lamp ballasts. Such rule shall contain such amendment, if any, and provide that the

amendment shall apply to products manufactured on or after Janu-

ary 1, 1995.

(B) After January 1, 1992, the Secretary shall publish a final rule no later than five years after the date of publication of a previous final rule. The Secretary shall determine in such rule whether to amend the standards in effect for fluorescent lamp ballasts, including whether such standards should be amended so that they would be applicable to additional fluorescent lamp ballasts.

(C) Any amendment prescribed under subparagraph (B) shall apply to products manufactured after a date which is five years

after—

(i) the effective date of the previous amendment; or

(ii) if the previous final rule did not amend the standards, the earliest date by which a previous amendment could have been effective;

except that in no case may any amended standard apply to products manufactured within three years after publication of the final rule establishing such amended standard.

(8)(A) Each fluorescent lamp ballast (other than replacement ballasts on hallasts described in subnavament (C))

lasts or ballasts described in subparagraph (C))—

(i)(I) manufactured on or after July 1, 2009;

(II) sold by the manufacturer on or after October 1, 2009; or (III) incorporated into a luminaire by a luminaire manufacturer on or after July 1, 2010; and

(ii) designed—

- (I) to operate at nominal input voltages of 120 or 277 volts;
- (II) to operate with an input current frequency of 60 Hertz; and
- (III) for use in connection with F34T12 lamps, F96T12/ES lamps, or F96T12HO/ES lamps;

shall have a power factor of 0.90 or greater and shall have a ballast efficacy factor of not less than the following:

Application for operation of	Ballast input voltage	Total nominal lampwatts	Ballast efficacy factor
One F34T12 lamp	120/277	34	2.61
Two F34T12 lamps	120/277	68	1.355
Two F96T12/ES lamps	120/277	120	0.77
Two F96T12H0/ES lamps	120/277	190	0.42

- (B) The standards described in subparagraph (A) shall apply to all ballasts covered by subparagraph (A)(ii) that are manufactured on or after July 1, 2010, or sold by the manufacturer on or after October 1, 2010.
- (C) The standards described in subparagraph (A) do not apply to—
 - (i) a ballast that is designed for dimming to 50 percent or less of the maximum output of the ballast;
 - (ii) a ballast that is designed for use with 2 F96T12HO lamps at ambient temperatures of [20F] -20F or less and for use in an outdoor sign; or
 - (iii) a ballast that has a power factor of less than 0.90 and is designed and labeled for use only in residential applications.
- (9) Residential Clothes Washers Manufactured on or after January 1, 2011.—

- (A) IN GENERAL.—A top-loading or front-loading standardsize residential clothes washer manufactured on or after January 1, 2011, shall have—
 - (i) a Modified Energy Factor of at least 1.26; and

(ii) a water factor of not more than 9.5.

(B) AMENDMENT OF STANDARDS.—

- [(i) IN GENERAL.—Not later than December 31, 2011, the Secretary shall publish a final rule determining whether to amend the standards in effect for clothes washers manufactured on or after January 1, 2015.
- [(ii) AMENDED STANDARDS.—The final rule shall contain any amended standards.]
- (B) AMENDMENT OF STANDARDS.—
 - (i) Products manufactured on or after January 1, 2015.—
 - (I) IN GENERAL.—Based on the test procedure in effect on July 9, 2010, clothes washers manufactured on or after January 1, 2015, shall comply with the minimum modified energy factors and maximum water factors specified in the table contained in subclause (II).
 - (II) STANDARDS.—The minimum modified energy factors and maximum water factors referred to in subclause (I) are as follows:

	MEF	WF
Top Loading—Standard	1.72	8.0
Top Loading—Compact	1.26	14.0
Front Loading—Standard	2.2	4.5
Front Loading—Compact (less than 1.6 cu. ft. capacity)	1.72	8.0.

- (ii) Products manufactured on or after january 1, 2018.—
 - (I) In General.—Based on the test procedure in effect on July 9, 2010, top-loading clothes washers manufactured on or after January 1, 2018, shall comply with the minimum modified energy factors and maximum water factors specified in the table contained in subclause (II).
 - (II) STANDARDS.—The minimum modified energy factors and maximum water factors referred to in subclause (I) are as follows:

	MEF	WF
Top Loading—Standard	2.0	6.0
Top Loading—Compact	1.81	11.6.

(iii) FINAL RULE.—

- (I) IN GENERAL.—The final rule to amend the clothes washer test procedure adopted pursuant to section 323(b)(24)(A) shall amend the standards described in clauses (i) and (ii) in accordance with the procedures described in section 323(e)(2).
- (II) Standby and off mode energy consumption.—

(aa) Integration.—The Secretary shall integrate standby and off mode energy consumption into the amended modified energy factor standards

required under subclause (I).

(bb) Requirements.—The amended modified energy factor standards described in item (aa) shall reflect levels of standby and off mode energy consumption that meet the criteria described in section 325(0).

(III) APPLICABILITY.

(aa)AMENDMENT OFSTANDARD.—Section 323(e)(3) shall not apply to the amended standards described in subclause (I).

(bb) Amended standards for products manu-FACTURED ON OR AFTER JANUARY 1, 2015.— Amended standards required by this clause that are based on clause (i) shall apply to products manufactured on or after January 1, 2015.

(cc) Amended standards for products manu-FACTURED ON OR AFTER JANUARY 1, 2018.— Amended standards required by this clause that are based on clause (ii) shall apply to products manu-

factured on or after January 1, 2018.

(10) RESIDENTIAL DISHWASHERS MANUFACTURED ON OR AFTER JANUARY 1, 2010.—

[(A IN GENERAL.—A dishwasher manufactured on or after January 1, 2010, shall-

(i) for a standard size dishwasher not exceed 355 kWh/ year and 6.5 gallons per cycle; and

(ii) for a compact size dishwasher not exceed 260 kWh/

year and 4.5 gallons per cycle.]

- (A) DISHWASHERS MANUFACTURED ON OR AFTER JANUARY 1, 2010.—A dishwasher manufactured on or after January 1, 2010, shall-
 - (i) for a standard size dishwasher, not exceed 355 kilowatt hours per year and 6.5 gallons per cycle; and

(ii) for a compact size dishwasher, not exceed 260 kilo-

watt hours per year and 4.5 gallons per cycle.

- (B) DISHWASHERS MANUFACTURED ON OR AFTER JANUARY 1, 2013.—A dishwasher manufactured on or after January 1, 2013, shall-
 - (i) for a standard size dishwasher, not exceed 307 kilowatt hours per year and 5.0 gallons per cycle; and
 - (ii) for a compact size dishwasher, not exceed 222 kilowatt hours per year and 3.5 gallons per cycle.

(C) REQUIREMENTS OF FINAL RULES.-

- (i) In General.—Any final rule to amend the dishwasher test procedure after July 9, 2010, and before January 1, 2013, shall amend the standards described in subparagraph (B) in accordance with the procedures described in section 323(e)(2).
 - (ii) APPLICABILITY.—

- (I) AMENDMENT OF STANDARD.—Section 323(e)(3) shall not apply to the amended standards described in clause (i).
- (II) Amended standards required by this subparagraph shall apply to products manufactured on or after January 1, 2013.
- [(B)] (D) AMENDMENT OF STANDARDS.—
 - (i) IN GENERAL.—Not later than January 1, 2015, the Secretary shall publish a final rule determining whether to amend the standards for dishwashers manufactured on or after January 1, 2018.
 - (ii) AMENDED STANDARDS.—The final rule shall contain any amended standards.

(h) STANDARDS FOR KITCHEN RANGES AND OVENS.-

[i GENERAL SERVICE FLUORESCENT LAMPS, GENERAL SERVICE IN-

CANDESCENT LAMPS, INTERMEDIATE BASE INCANDESCENT LAMPS, CANDELABRA BASE INCANDESCENT LAMPS, AND INCANDESCENT RE-FLECTOR LAMPS.-

1 Standards.-

[(A) DEFINITION OF EFFECTIVE DATE.—In this paragraph (other than subparagraph (D)), the term "effective date" means, with respect to each type of lamp specified in a table contained in subparagraph (B), the last day of the period of months corresponding to that type of lamp (as specified in the table) that follows October 24, 1992.

[(B) MINIMUM STANDARDS.—Each of the following general service fluorescent lamps and incandescent reflector lamps manufactured after the effective date specified in the tables contained in this paragraph shall meet or exceed the following lamp efficacy and CRI standards:

FFLUORESCENT LAMPS

Lamp Type	Nominal Lamp Wattage	Minimum CRI	Minimum Average Lamp Efficacy (LPW)	Effective Date (Period of Months)
4-foot medium bi-pin	>35 W	69	75.0	36
	≤35 W	45	75.0	36
2-foot U-shaped	>35 W	69	68.0	36
	≤35 W	45	64.0	36
8-foot-slimline	>65 W	69	80.0	18
	≤65 W	45	80.0	18
8-foot high output	>100 W	69	80.0	18
	≤100 W	45	80.0	18.

FINCANDESCENT REFLECTOR LAMPS

Nominal Lamp Wattage	Minimum Average Lamp Efficacy (LPW)	Effective Date (Period of Months)
40–50	10.5	36
51-66	11.0	36
67–85	12.5	36
86–115	14.0	36
116–155	14.5	36
156–205	15	36.

[(C) EXEMPTIONS.—The standards specified in subparagraph (B) shall not apply to the following types of incandescent reflector lamps:

[(i) Lamps rated at 50 watts or less that are ER30,

BR30, BR40, or ER40 lamps.

[(ii) Lamps rated at 65 watts that are BR30, BR40, or ER40 lamps.

[(iii) R20 incandescent reflector lamps rated 45 watts or less.

(D) Effective dates.—

[(i) ER, BR, AND BPAR LAMPS.—The standards specified in subparagraph (B) shall apply with respect to ER incandescent reflector lamps, BR incandescent reflector lamps, BPAR incandescent reflector lamps, and similar bulb shapes on and after January 1, 2008.

[(ii) LAMPS BETWEEN 2.25–2.75 INCHES IN DIAMETER.—The standards specified in subparagraph (B) shall apply with respect to incandescent reflector lamps with a diameter of more than 2.25 inches, but not more than 2.75 inches, on and after the later of January 1, 2008, or the date that is 180 days after the date of enactment of the Energy Independence and Security Act of 2007.

[(2) Notwithstanding section 332(a)(5) and section 332(b), it shall not be unlawful for a manufacturer to sell a lamp which is in compliance with the law at the time such lamp was man-

ufactured.

[(3) Not less than 36 months after the date of the enactment of this subsection, the Secretary shall initiate a rulemaking procedure and shall publish a final rule not later than the end of the 54-month period beginning on the date of the enactment of this subsection to determine if the standards established under paragraph (1) should be amended. Such rule shall contain such amendment, if any, and provide that the amendment shall apply to products manufactured on or after the 36-month period beginning on the date such final rule is published.

[(4) Not less than eight years after the date of the enactment of this subsection, the Secretary shall initiate a rule-making procedure and shall publish a final rule not later than nine years and six months after the date of the enactment of this subsection to determine if the standards in effect for fluorescent lamps and incandescent lamps should be amended. Such rule shall contain such amendment, if any, and provide that the amendment shall apply to products manufactured on or after the 36-month period beginning on the date such final

rule is published.

[(5) Not later than the end of the 24-month period beginning on the date labeling requirements under section 324(a)(2)(C) become effective, the Secretary shall initiate a rulemaking procedure to determine if the standards in effect for fluorescent lamps and incandescent lamps should be amended so that they would be applicable to additional general service fluorescent and shall publish, not later than 18 months after initiating such rulemaking, a final rule including such amended standards, if any. Such rule shall provide that the amendment shall

apply to products manufactured after a date which is 36 months after the date such rule is published.

(6) Standards for general service lamps.—

(A) Rulemaking before January 1, 2014.—

(i) IN GENERAL.—Not later than January 1, 2014, the Secretary shall initiate a rulemaking procedure to determine whether-

[(I) standards in effect for general service lamps should be amended to establish more stringent standards than the standards specified in paragraph (1)(A); and

[(II) the exemptions for certain incandescent lamps should be maintained or discounted based, in part, on exempted lamp sales collected by the Secretary from manufacturers.

(ii) Scope.—The rulemaking-

(I) shall not be limited to incandescent lamp technologies; and

[(II) shall include consideration of a minimum standard of 45 lumens per watt for general service

[(iii) AMENDED STANDARDS.—If the Secretary determines that the standards in effect for general service incandescent lamps should be amended, the Secretary shall publish a final rule not later than January 1, 2017, with an effective date that is not earlier than 3 years after the date on which the final rule is published.

(iv) Phased-in effective dates.—The Secretary shall consider phased-in effective dates under this sub-

paragraph after considering— $\hspace{-0.5cm} \blacksquare (I) \hspace{0.1cm} \text{the impact of any amendment on manufac-}$ turers, retiring and repurposing existing equipment, stranded investments, labor contracts, workers, and raw materials; and

[(II) the time needed to work with retailers and lighting designers to revise sales and marketing

strategies.

(v) Backstop requirement.—If the Secretary fails to complete a rulemaking in accordance with clauses (i) through (iv) or if the final rule does not produce savings that are greater than or equal to the savings from a minimum efficacy standard of 45 lumens per watt, effective beginning January 1, 2020, the Secretary shall prohibit the sale of any general service lamp that does not meet a minimum efficacy standard of 45 lumens per watt.

(vi) State preemption.—Neither section 327(b) nor any other provision of law shall preclude California or Nevada from adopting, effective beginning on or after

January 1, 2018–

(I) a final rule adopted by the Secretary in accordance with clauses (i) through (iv);

[(II) if a final rule described in subclause (I) has not been adopted, the backstop requirement under

clause (v); or

[(III) in the case of California, if a final rule described in subclause (I) has not been adopted, any California regulations relating to these covered products adopted pursuant to State statute in effect as of the date of enactment of the Energy Independence and Security Act of 2007.

[(A) RULEMAKING BEFORE JANUARY 1, 2020.—

[(i) IN GENERAL.—Not later than January 1, 2020, the Secretary shall initiate a rulemaking procedure to determine whether—

[(I) standards in effect for general service incandescent lamps should be amended to reflect lumen ranges with more stringent maximum wattage than the standards specified in paragraph (1)(A); and

[(II) the exemptions for certain incandescent lamps should be maintained or discontinued based, in part, on exempted lamp sales data collected by the Secretary from manufacturers.

[(ii) Scope.—The rulemaking shall not be limited to

incandescent lamp technologies.

[(iii) AMENDED STANDARDS.—If the Secretary determines that the standards in effect for general service incandescent lamps should be amended, the Secretary shall publish a final rule not later than January 1, 2022, with an effective date that is not earlier than 3 years after the date on which the final rule is published.

[(iv) Phased-in effective dates.—The Secretary shall consider phased-in effective dates under this sub-

paragraph after considering-

[(I) the impact of any amendment on manufacturers, retiring and repurposing existing equipment, stranded investments, labor contracts, workers, and raw materials; and

[(II) the time needed to work with retailers and lighting designers to revise sales and marketing

strategies.

[(7)(A) With respect to any lamp to which standards are applicable under this subsection or any lamp specified in section 346, the Secretary shall inform any Federal entity proposing actions which would adversely impact the energy consumption or energy efficiency of such lamp of the energy conservation consequences of such action. It shall be the responsibility of such Federal entity to carefully consider the Secretary's comments

[(B) Notwithstanding section 325(n)(1), the Secretary shall not be prohibited from amending any standard, by rule, to permit increased energy use or to decrease the minimum required energy efficiency of any lamp to which standards are applicable under this subsection if such action is warranted as a result of other Federal action (including restrictions on materials or

processes) which would have the effect of either increasing the energy use or decreasing the energy efficiency of such product.

(8) Not later than the date on which standards established pursuant to this subsection become effective, or, with respect to high-intensity discharge lamps covered under section 346, the effective date of standards established pursuant to such section, each manufacturer of a product to which such standards are applicable shall file with the Secretary a laboratory report certifying compliance with the applicable standard for each lamp type. Such report shall include the lumen output and wattage consumption for each lamp type as an average of measurements taken over the preceding 12-month period. With respect to lamp types which are not manufactured during the 12-month period preceding the date such standards become effective, such report shall be filed with the Secretary not later than the date which is 12 months after the date manufacturing is commenced and shall include the lumen output and wattage consumption for each such lamp type as an average of measurements taken during such 12-month period.

(i) General Service Fluorescent Lamps, General Service Incandescent Lamps, Intermediate Base Incandescent Lamps, Candelabra Base Incandescent Lamps, and Incandescent Re-FLECTOR LAMPS.—

(1) Energy efficiency standards.—

(A) IN GENERAL.—Each of the following general service fluorescent lamps, general service incandescent lamps, intermediate base incandescent lamps, candelabra base incandescent lamps, and incandescent reflector lamps manufactured after the effective date specified in the tables listed in this subparagraph shall meet or exceed the standards established in the following tables:

FLUORESCENT LAMPS

<i>Lamp Туре</i>	Nominal Lamp Watt- age	Minimum CRI	Minimum Average Lamp Efficacy (LPW)	Effective Date (Pe- riod of Months)
4-foot medium bi-pin	>35W	69	75.0	36
	≤35W	45	75.0	36
2-foot U-shaped	>35W	69	68.0	36
	≤35W	45	64.0	36
8-foot slimline	>65W	69	80.0	18
	≤ <i>65W</i>	45	80.0	18
8-foot high output	>100 W	69	80.0	18
- '	≤100 W	45	80.0	18

INCANDESCENT RELECTOR LAMPS

Nominal Lamp Wattage	Minimum Average Lamp Efficacy (LPW)	Effective Date (Pe- riod of Months)
40–50	10.5	36
51–66	11.0	36
67–85	12.5	36
86–115	14.0	36
116–155	14.5	36
156–205	15.0	36

GENERAL SERVICE INCANDESCENT LAMPS

Rated Lumen Ranges	Maximum Rated Wattage	Minimum Rated Life- time	Effective Date
1490–2600	72	1,000 hrs	1/1/2012
1050 091489	53	1,000 hrs	1/1/2013
750 091049	43	1,000 hrs	1/1/2014
310 09749	29	1,000 hrs	1/1/2014

MODIFIED SPECTRUM GENERAL SERVICE INCANDESCENT LAMPS

Rated Lumen Ranges	Maximum Rated Wattage	Minimum Rated Life- time	Effective Date
1118 091950	72	1,000 hrs	1/1/2012
788 091117	53	1,000 hrs	1/1/2013
563 09787	43	1,000 hrs	1/1/2014
232 09562	29	1,000 hrs	1/1/2014

(B) APPLICATION.—

(i) Application criteria.—This subparagraph applies to each lamp that-

(I) is intended for a general service or general illumination application (whether incandescent or not);

(II) has a medium screw base or any other screw base not defined in ANSI C81.61-92006;

(III) is capable of being operated at a voltage at least partially within the range of 110 to 130 volts; and

(IV) is manufactured or imported after December 31, 2011.

(ii) Requirement.—For purposes of this paragraph, each lamp described in clause (i) shall have a color rendering index that is greater than or equal to-

(I) 80 for nonmodified spectrum lamps; or

(II) 75 for modified spectrum lamps.

(C) CANDELABRA INCANDESCENT LAMPS AND INTER-MEDIATE BASE INCANDESCENT LAMPS.—

(i) CANDELABRA BASE INCANDESCENT LAMPS.—Effective beginning January 1, 2012, a candelabra base incandescent lamp shall not exceed 60 rated watts.

(ii) Intermediate base incandescent lamps.—Effective beginning January 1, 2012, an intermediate base incandescent lamp shall not exceed 40 rated watts.

(D) EXEMPTIONS.—

(i) Statutory exemptions.—The standards specified in subparagraph (A) shall not apply to the following types of incandescent reflector lamps:

(I) Lamps rated at 50 watts or less that are ER30, BR30, BR40, or ER40 lamps.

(II) Lamps rated at 65 watts that are BR30, BR40, or ER40 lamps.

(III) R20 incandescent reflector lamps rated 45 watts or less.

(ii) Administrative exemptions.—

(I) PETITION.—Any person may petition the Secretary for an exemption for a type of general service lamp from the requirements of this subsection.

(II) CRITERIA.—The Secretary may grant an exemption under subclause (I) only to the extent that the Secretary finds, after a hearing and opportunity for public comment, that it is not technically feasible to serve a specialized lighting application (such as a military, medical, public safety, or certified historic lighting application) using a lamp that meets the requirements of this subsection.

(III) ADDITIONAL CRITERION.—To grant an ex-

(III) ADDITIONAL CRITERION.—To grant an exemption for a product under this clause, the Secretary shall include, as an additional criterion, that the exempted product is unlikely to be used in

a general service lighting application.

(E) EXTENSION OF COVERAGE.—

(i) PETITION.—Any person may petition the Secretary to establish standards for lamp shapes or bases that are excluded from the definition of general service

lamps.

(ii) Increased sales of exempted lamps.—The petition shall include evidence that the availability or sales of exempted incandescent lamps have increased significantly since the date on which the standards on general service incandescent lamps were established.

(iii) Criteria.—The Secretary shall grant a petition

under clause (i) if the Secretary finds that—

(I) the petition presents evidence that demonstrates that commercial availability or sales of exempted incandescent lamp types have increased significantly since the standards on general service lamps were established and likely are being widely used in general lighting applications; and

(II) significant energy savings could be achieved by covering exempted products, as determined by the Secretary based in part on sales data provided to the Secretary from manufacturers and import-

ers.

- (iv) No presumption.—The grant of a petition under this subparagraph shall create no presumption with respect to the determination of the Secretary with respect to any criteria under a rulemaking conducted under this section.
- (v) Expedited proceeding.—If the Secretary grants a petition for a lamp shape or base under this subparagraph, the Secretary shall—

(I) conduct a rulemaking to determine standards

for the exempted lamp shape or base; and

(II) complete the rulemaking not later than 18 months after the date on which notice is provided granting the petition.

(F) EFFECTIVE DATES.—

(i) IN GENERAL.—In this paragraph, except as otherwise provided in a table contained in subparagraph (A)

or in clause (ii), the term 'effective date' means the last day of the period of months specified in the table after October 24, 1992.

(ii) Special effective dates.—

(I) ER, BR, AND BPAR LAMPS.—The standards specified in subparagraph (A) shall apply with respect to ER incandescent reflector lamps, BR incandescent reflector lamps, BPAR incandescent reflector lamps, and similar bulb shapes on and after January 1, 2008, or the date that is 180 days after the date of enactment of the Energy Independence and Security Act of 2007.

(II) LAMPS BETWEEN 2.25-2.75 INCHES IN DIAME-TER.—The standards specified in subparagraph (A) shall apply with respect to incandescent reflector lamps with a diameter of more than 2.25 inches, but not more than 2.75 inches, on and after the later of January 1, 2008, or the date that is 180 days after the date of enactment of the Energy

Independence and Security Act of 2007.

(2) Compliance with existing law.—Notwithstanding section 332(a)(5) and section 332(b), it shall not be unlawful for a manufacturer to sell a lamp that is in compliance with the law at the time the lamp was manufactured.

(3) Rulemaking before october 24, 1995.—

(A) In general.—Not later than 36 months after October 24, 1992, the Secretary shall initiate a rulemaking procedure and shall publish a final rule not later than the end of the 54-month period beginning on October 24, 1992, to determine whether the standards established under paragraph (1) should be amended.

(B) ADMINISTRATION.—The rule shall contain the amendment, if any, and provide that the amendment shall apply to products manufactured on or after the 36-month period beginning on the date on which the final rule is published.

(4) RULEMAKING BEFORE OCTOBER 24, 2000.

(A) In General.—Not later than 8 years after October 24, 1992, the Secretary shall initiate a rulemaking procedure and shall publish a final rule not later than 9 years and 6 months after October 24, 1992, to determine whether the standards in effect for fluorescent lamps and incandescent lamps should be amended.

(B) ADMINISTRATION.—The rule shall contain the amendment, if any, and provide that the amendment shall apply to products manufactured on or after the 36-month period beginning on the date on which the final rule is published.

(5) Rulemaking for additional general service fluores-

CENT LAMPS .-

(A) In general.—Not later than the end of the 24-month period beginning on the date labeling requirements under section 324(a)(2)(C) become effective, the Secretary shall—

(i) initiate a rulemaking procedure to determine whether the standards in effect for fluorescent lamps and incandescent lamps should be amended so that the standards would be applicable to additional general service fluorescent lamps; and

(ii) publish, not later than 18 months after initiating the rulemaking, a final rule including the amended

standards, if any.

(B) Administration.—The rule shall provide that the amendment shall apply to products manufactured after a date which is 36 months after the date on which the rule is published.

(6) ŜTANDARDS FOR GENERAL SERVICE LAMPS.—
(A) RULEMAKING BEFORE JANUARY 1, 2014.—

(i) In General.—Not later than January 1, 2014, the Secretary shall initiate a rulemaking procedure to determine whether—

(I) standards in effect for general service lamps

should be amended; and

(II) the exclusions for certain incandescent lamps should be maintained or discontinued based, in part, on excluded lamp sales collected by the Secretary from manufacturers.

(ii) Scope.—The rulemaking—

(I) shall not be limited to incandescent lamp

technologies; and

(II) shall include consideration of a minimum standard of 45 lumens per watt for general service lamps.

(iii) AMENDED STANDARDS.—If the Secretary determines that the standards in effect for general service lamps should be amended, the Secretary shall publish a final rule not later than January 1, 2017, with an effective date that is not earlier than 3 years after the date on which the final rule is published.

(iv) Phased-in effective dates under this sub-

paragraph after considering—

(I) the impact of any amendment on manufacturers, retiring and repurposing existing equipment, stranded investments, labor contracts, workers, and raw materials; and

(II) the time needed to work with retailers and lighting designers to revise sales and marketing

strategies.

(v) Backstop requirement.—If the Secretary fails to complete a rulemaking in accordance with clauses (i) through (iv) or if the final rule does not produce savings that are greater than or equal to the savings from a minimum efficacy standard of 45 lumens per watt, effective beginning January 1, 2020, the Secretary shall prohibit the manufacture of any general service lamp that does not meet a minimum efficacy standard of 45 lumens per watt.

(vi) State preemption.—Neither section 327 nor any other provision of law shall preclude California or Nevada from adopting, effective beginning on or after

January 1, 2018—

(I) a final rule adopted by the Secretary in ac-

cordance with clauses (i) through (iv);

(II) if a final rule described in subclause (I) has not been adopted, the backstop requirement under

clause (v); or

(III) in the case of California, if a final rule described in subclause (I) has not been adopted, any California regulations relating to these covered products adopted pursuant to State statute in effect on the date of enactment of the Energy Independence and Security Act of 2007.

(B) RULEMAKING BEFORE JANUARY 1, 2020.—

(i) In General.—Not later than January 1, 2020, the Secretary shall initiate a rulemaking procedure to determine whether—

(I) standards in effect for general service lamps

should be amended; and

(II) the exclusions for certain incandescent lamps should be maintained or discontinued based, in part, on excluded lamp sales data collected by the Secretary from manufacturers.

(ii) Scope.—The rulemaking shall not be limited to

incandescent lamp technologies.

(iii) AMENDED STANDARDS.—If the Secretary determines that the standards in effect for general service lamps should be amended, the Secretary shall publish a final rule not later than January 1, 2022, with an effective date that is not earlier than 3 years after the date on which the final rule is published.

(iv) Phased-in effective dates under this sub-

paragraph after considering—

(I) the impact of any amendment on manufacturers, retiring and repurposing existing equipment, stranded investments, labor contracts, workers, and raw materials; and

(II) the time needed to work with retailers and lighting designers to revise sales and marketing strategies.

(7) FEDERAL ACTIONS.—

(A) COMMENTS OF SECRETARY.—

(i) IN GENERAL.—With respect to any lamp to which standards are applicable under this subsection or any lamp specified in section 346, the Secretary shall inform any Federal entity proposing actions that would adversely impact the energy consumption or energy efficiency of the lamp of the energy conservation consequences of the action.

(ii) Consideration.—The Federal entity shall care-

fully consider the comments of the Secretary.

(B) AMENDMENT OF STANDARDS.—Notwithstanding section 325(n)(1), the Secretary shall not be prohibited from amending any standard, by rule, to permit increased energy use or to decrease the minimum required energy efficiency of any lamp to which standards are applicable

under this subsection if the action is warranted as a result of other Federal action (including restrictions on materials or processes) that would have the effect of either increasing the energy use or decreasing the energy efficiency of the product.

(8) COMPLIANCE.—

(A) IN GENERAL.—Not later than the date on which standards established pursuant to this subsection become effective, or, with respect to high-intensity discharge lamps covered under section 346, the effective date of standards established pursuant to that section, each manufacturer of a product to which the standards are applicable shall file with the Secretary a laboratory report certifying compliance with the applicable standard for each lamp type.

(B) CONTENTS.—The report shall include the lumen output and wattage consumption for each lamp type as an average of measurements taken over the preceding 12-month

period.

(C) OTHER LAMP TYPES.—With respect to lamp types that are not manufactured during the 12-month period preceding the date on which the standards become effective, the report shall—

(i) be filed with the Secretary not later than the date that is 12 months after the date on which manufac-

turing is commenced; and

(ii) include the lumen output and wattage consumption for each such lamp type as an average of measurements taken during the 12-month period.

(9) Reflector Lamps.—In conducting rulemakings for reflector lamps after January 1, 2014, the Secretary shall consider—

(A) incandescent and nonincandescent technologies; and (B) a new energy-related measure, other than lumens per watt, that is based on the photometric distribution of those lamps.

* * * * * * * * *

(j) Standards for Showerheads and Faucets.—

* * * * * * *

(1) STANDARDS FOR OTHER COVERED PRODUCTS.—(1) The Secretary may prescribe an energy conservation standard for any type (or class) of covered products of a type specified in paragraph [(19)] (23) of section 322(a) if the requirements of subsections (o) and (p) are met and the Secretary determines that—

(A) the average per household energy use within the United States by products of such type (or class) exceeded 150 kilowatt-hours (or its Btu equivalent) for any 12-month period end-

ing before such determination;

* * * * * * *

(2) Any new or amended standard for covered products of a type specified in paragraph [(19)] (23) of section 322(a) shall not apply to products manufactured within five years after the publication of a final rule establishing such standard.

(3) The Secretary may, in accordance with subsections (o) and (p), prescribe an energy conservation standard for television sets.

Any such standard may not become effective with respect to products manufactured before January 1, 1992.

(4) Energy efficiency standards for certain lamps.—

(A) IN GENERAL.—The Secretary shall prescribe an energy efficiency standard for rough service lamps, vibration service lamps, 3-way incandescent lamps, 2,601–3,300 lumen general service incandescent lamps, and shatter-resistant lamps [only] in accordance with this paragraph.

* * * * * * * * * * * * * * (m) Amendment of Standards.—

(n) PETITION FOR AN AMENDED STANDARD.—(1) With respect to each covered product described in paragraphs (1) through (11), and in paragraphs (13) and (14) of section 322(a), any person may petition the Secretary to conduct a rulemaking to determine for a covered product if the standards contained either in the last final rule required under subsections (b) through (i) of this section or in a final rule published under this section should be amended.

(2) The Secretary shall grant a petition if he finds that it contains evidence which, assuming no other evidence were considered, provides an adequate basis for amending the standards under the

following criteria—

 (\bar{A}) amended standards will result in significant conservation of energy;

(B) amended standards are technologically feasible; and

(C) amended standards are cost effective as described in subsection (o)(2)(B)(i)(II).

The grant of a petition by the Secretary under this subsection creates no presumption with respect to the Secretary's determination of any of the criteria in a rulemaking under this section.

(3) Notice of decision.—Not later than 180 days after the date of receiving a petition, the Secretary shall publish in the Federal Register a notice of, and explanation for, the decision of the Secretary to grant or deny the petition.

(4) NEW OR AMENDED STANDARDS.—Not later than 3 years after the date of granting a petition for new or amended standards, the

Secretary shall publish in the Federal Register—

(A) a final rule that contains the new or amended standards; or

(B) a determination that no new or amended standards are necessary.

[(3)] (5) An amendment prescribed under this subsection shall apply to products manufactured after a date which is 5 years after—

(A) the effective date of the previous amendment pursuant to

this part; or

(B) if the previous final rule published under this part did not amend the standard, the earliest date by which a previous amendment could have been in effect, except that in no case may an amended standard apply to products manufactured within 3 years (for refrigerators, refrigerator-freezers, and freezers, room air conditioners, dishwashers, clothes washers, clothes dryers, fluorescent lamp ballasts, general service fluorescent lamps, incandescent reflector lamps, and kitchen

ranges and ovens) or 5 years (for central air conditioners and heat pumps, water heaters, pool heaters, direct heating equipment and furnaces) after publication of the final rule establishing a standard.

(o) CRITERIA FOR PRESCRIBING NEW OR AMENDED STANDARDS.—
(1) The Secretary may not prescribe any amended standard which increases the maximum allowable energy use, or, in the case of showerheads, faucets, water closets, or urinals, water use, or decreases the minimum required energy efficiency, of a covered product.

* * * * * * *

- (r) Inclusion in Standards of Test Procedures and Other Requirements.—Any new or amended energy conservation standard prescribed under this section shall include, where applicable, test procedures prescribed in accordance with section 323 and may include any requirement which the Secretary determines is necessary to assure that each covered product to which such standard applies meets the required minimum level of energy efficiency or maximum quantity of energy use specified in such standard.
- (u) Battery Charger and External Power Supply Electric Energy Consumption.—(1)(A) Not later than 18 months after the date of enactment of this subsection, the Secretary shall, after providing notice and an opportunity for comment, prescribe, by rule, definitions and test procedures for the power use of battery char-

* * * * * * * *

[(7)] (4) END-USE PRODUCTS.—An energy conservation standard for external power supplies shall not constitute an energy conservation standard for the separate end-use product to which the external power [supplies is] supply is connected.

* * * * * * *

- (z) Traffic Signal Modules and Pedestrian Modules.—Any traffic signal module or pedestrian module manufactured on or after January 1, 2006, shall—
 - (1) meet the performance requirements used under the Energy Star program of the Environmental Protection Agency for traffic signals, as in effect on the date of enactment of this subsection; and

(2) be installed with compatible, electrically connected signal control interface devices and conflict monitoring systems.

- (aa) Unit Heaters.—A unit heater manufactured on or after the date that is 3 years after the date of enactment of this subsection shall—
 - (1) be equipped with an intermittent ignition device; and
 - (2) have power venting or an automatic flue damper.

(hh) METAL HALIDE LAMP FIXTURES.—

(1) STANDARDS.—

gers and external power supplies.

(A) IN GENERAL.—Subject to subparagraphs (B) and (C), metal halide lamp fixtures designed to be operated with

lamps rated greater than or equal to 150 watts but less than or equal to 500 watts shall contain-

(i) a pulse-start metal halide ballast with a minimum

ballast efficiency of 88 percent;

(ii) BOTTLE-TYPE WATER DISPENSERS.—Effective beginning on the date that is 1 year after the date of enactment of the Implementation of National Consensus Appliance Agreements Act of 2011-

(1) a bottle-type water dispenser shall not have standby energy consumption that is greater than 1.2 kilowatt-hours per

day; and

(2) a compartment bottle-type water dispenser shall not have standby energy consumption that is greater than 1.3 kilowatt-

hours per day.

(jj) COMMERCIAL HOT FOOD HOLDING CABINETS.—Effective beginning on the date that is 1 year after the date of enactment of the Implementation of National Consensus Appliance Agreements Act of 2011, a commercial hot food holding cabinet shall have a maximum idle energy rate of 40 watts per cubic foot of interior volume.

(kk) PORTABLE ELECTRIC SPAS.—Effective beginning on the date that is 1 year after the date of enactment of the Implementation of

National Consensus Appliance Agreements Act of 2011, a portable electric spa shall not have a normalized standby power rate of greater than 5 (V2/3) Watts (in which "V" equals the fill volume (in gallons)).

(ll) Revisions.—

(1) In general.—Not later than the date that is 3 years after the date of enactment of the Implementation of National Consensus Appliance Agreements Act of 2011, the Secretary shall—

(A) consider in accordance with subsection (o) revisions to the standards established under subsections (ii), (jj), and

(kk); and

(B)(i) publish a final rule establishing the revised standards; or

(ii) make a finding that no revisions are technically fea-

sible and economically justified.

- (2) Effective date.—Any revised standards under this subsection shall take effect not earlier than the date that is 3 years after the date of the publication of the final rule.
- (ii) (mm) GU–24 BASE LAMPS.

(1) In General.—A GU-24 base lamp shall not be an incandescent lamp as defined by ANSI.

(2) GU-24 ADAPTORS.—GU-24 adaptors shall not adapt a GU-24 socket to any other line voltage socket.

[(ii)] (nn) APPLICATION DATE.—Section 327 applies—

(1) to products for which energy conservation standards are to be established under subsection (l), (u), or (v) or section 324B beginning on the date on which a final rule is issued by the Secretary, except that any State or local standard prescribed or enacted for the product before the date on which the final rule is issued shall not be preempted until the energy conservation standard established under subsection (l), (u), or (v) or section 324B for the product takes effect; and

(2) to products for which energy conservation standards are established under subsections (w) through (hh) on the date of enactment of those subsections, except that any State or local

standard prescribed or enacted before the date of enactment of those subsections shall not be preempted until the energy conservation standards established under subsections (w) through (hh) (mm) take effect.

REQUIRMENTS OF MANUFACTURERS

Sec. 326. (a) In General.—

EFFECT ON OTHER LAW

Sec. 327. (a) Preemption of Testing and Labeling Require-MENTS.—(1) Effective on the date of enactment of the National Appliance Energy Conservation Act of 1987, this part supersedes any State regulation insofar as such State regulation provides at any time for the disclosure of information with respect to any measure of energy consumption or water use of any covered product if-

(b) General Rule of Preemption for Energy Conservation STANDARDS BEFORE FEDERAL STANDARD BECOMES EFFECTIVE FOR A PRODUCT.—Effective on the date of enactment of the National Appliance Energy Conservation Act of 1987 and ending on the effective date of an energy conservation standard established under section 325 for any covered product, no State regulation, or revision thereof, concerning the energy efficiency, energy use, or water use of the covered product shall be effective with respect to such covered product, unless the State regulation or revision-

(1)(A) was prescribed or enacted before January 8, 1987, and is applicable to products before January 3, 1988, or in the case of any portion of any regulation which establishes requirements for fluorescent lamp ballasts, was prescribed or enacted before the date of the enactment of the National Appliance Energy Conservation Amendments of 1988, or in the case of any portion of any regulation which establishes requirements for fluorescent or incandescent lamps, flow rate requirements for showerheads or faucets, or water use requirements for water closets or urinals, was prescribed or enacted before the date of

the enactment of the Energy Policy Act of 1992; or
(B) in the case of any portion of any regulation that establishes requirements for general service incandescent lamps, intermediate base incandescent lamps, or candelabra base lamps, was enacted or adopted by the State of California or Nevada before December 4, 2007, except that-

(i) the regulation adopted by the California Energy Commission with an effective date of January 1, 2008, shall only be effective until the effective date of the Federal standard for the applicable lamp category under subpara-

graphs (A), (B), and (C) of section 325(i)(1); and

(ii) the States of California and Nevada may, at any time, modify or adopt a State standard for general service lamps to conform with Federal standards with effective dates no earlier than 12 months prior to the Federal effective dates prescribed under subparagraphs (A), (B), and

(C) of section 325(i)(1), at which time any prior regulations adopted by the State of California or Nevada shall no longer be effective; [and]

[(iii) all other States may, at any time, modify or adopt a State standard for general service lamps to conform with Federal standards and effective dates.]

(2) is a State procurement regulation described in subsection (e):

(3) is a regulation described in subsection (f)(1) or is prescribed or enacted in a building code for new construction described in subsection (f)(2);

* * * * * * *

- (6) is a regulation effective on or after January 1, 1992, concerning the energy efficiency or energy use of television sets; [or]
- $(\bar{7})$ is a regulation (or portion thereof) concerning the water efficiency or water use of low consumption flushometer valve water closets [.]; or

(8) is a regulation that—

- (A) establishes efficiency standards for bottle-type water dispensers, compartment bottle-type water dispensers, commercial hot food holding cabinets, or portable electric spas; and
- (B) is in effect on or before the date of enactment of this paragraph.
- (c) GENERAL RULE OF PREEMPTION FOR ENERGY CONSERVATION STANDARDS WHEN FEDERAL STANDARD BECOMES EFFECTIVE FOR A PRODUCT.—Except as provided in section 325(b)(3)(A)(ii), subparagraphs (B) and (C) of section 325(j)(3), and subparagraphs (B) and (C) of section 325(k)(3) and effective on the effective date of an energy conservation standard established in or prescribed under section 325 for any covered product, no State regulation concerning the energy efficiency, energy use, or water use of such covered product shall be effective with respect to such product unless the regulation—
 - (1) is a regulation described in paragraph (2) or (4) of subsection (b), except that a State regulation (or portion thereof) regulating fluorescent lamp ballasts other than those to which paragraph (5) of section 325(g) is applicable shall be effective only until the effective date of a standard that is prescribed by the Secretary under paragraph (7) of such section and is applicable to such ballasts, except that a State regulation (or portion thereof) regulating fluorescent or incandescent lamps other than those for which section 325(i) is applicable shall be effective only until the effective date of a standard that is prescribed by the Secretary and is applicable to such lamps;
 - (2) is a regulation which has been granted a waiver under subsection (d);
 - (3) is in a building code for new construction described in subsection (f)(3);
 - (4) is a regulation concerning the water use of lavatory faucets adopted by the State of New York or the State of Georgia before the date of the enactment of the Energy Policy Act of 1992;

(5) is a regulation concerning the water use of lavatory or kitchen faucets adopted by the State of Rhode Island prior to the date of the enactment of the Energy Policy Act of 1992;

(6) is a regulation (or portion thereof) concerning the water efficiency or water use of gravity tank-type low consumption water closets for installation in public places, except that such a regulation shall be effective only until January 1, 1997; [or]

(7)(A) is a regulation concerning standards for commercial prerinse spray valves adopted by the California Energy Commission before January 1, 2005; or

(B) is an amendment to a regulation described in subparagraph (A) that was developed to align California regulations with changes in American Society for Testing and Materials Standard F2324;

(8)(A) is a regulation concerning standards for pedestrian modules adopted by the California Energy Commission before

January 1, 2005; or

(B) is an amendment to a regulation described in subparagraph (A) that was developed to align California regulations to changes in the Institute for Transportation Engineers standards, entitled "Performance Specification: Pedestrian Traffic Control Signal Indications"; [and]

(9) is a regulation concerning metal halide lamp fixtures adopted by the California Energy Commission on or before January 1, 2011, [except that—

(A) if the Secretary except that if the Secretary fails to issue a final rule within 180 days after the deadlines for rulemakings in section 325(hh), notwithstanding any other provision of this section, preemption shall not apply to a regulation concerning metal halide lamp fixtures adopted by the California Energy Commission-

[(i)] (A) on or before July 1, 2015, if the Secretary fails to meet the deadline specified in section

325(hh)(2); or

[(ii)] (B) on or before July 1, 2022, if the Secretary fails to meet the deadline specified in section 325(hh)(3)[.];

(10) is a regulation that—

(A) establishes efficiency standards for bottle-type water dispensers, compartment bottle-type water dispensers, commercial hot food holding cabinets, or portable electric spas; and

(B) is adopted by the California Energy Commission on or before January 1, 2013;

(11) is a regulation for general service lamps that conforms

with Federal standards and effective dates; or

(12) is an energy efficiency standard for general service lamps enacted into law by the State of Nevada prior to December 19, 2007, if the State has not adopted the Federal standards and effective dates pursuant to subsection (b)(1)(B)(ii).

(f) Exception for Certain Building Code Requirements.—(1) A regulation or other requirement enacted or prescribed before January 8, 1987, that is contained in a State or local building code for new construction concerning the energy efficiency or energy use of a covered product is not superseded by this part until the effective date of the energy conservation standard established in or prescribed under section 325 for such covered product.

(3) Effective on the effective date of an energy conservation standard for a covered product established in or prescribed under section 325, a regulation or other requirement contained in a State or local building code for new construction concerning the energy efficiency or energy use of such covered product is not superseded by this part if the code complies with all of the following requirements:

(A) The code permits a builder to meet an energy consumption or conservation objective for a building by selecting items

whose combined energy efficiencies meet the objective.

(B) The code does not require that the covered product have an energy efficiency exceeding the applicable energy conservation standard established in or prescribed under section 325, except that the required efficiency may exceed such standard up to the level required by a regulation of that State for which the Secretary has issued a rule granting a waiver under subsection (d).

((C) The credit to the energy consumption or conservation objective allowed by the code for installing covered products having energy efficiencies exceeding such energy conservation standard established in or prescribed under section 325 or the efficiency level required in a State regulation referred to in subparagraph (B) is on a one-for-one equivalent energy use or equivalent cost basis.

(D) If the code uses one or more baseline building designs against which all submitted building designs are to be evaluated and such baseline building designs contain a covered product subject to an energy conservation standard established in or prescribed under section 325, the baseline building designs are based on the efficiency level for such covered product which meets but does not exceed such standard or the efficiency level required by a regulation of that State for which the Secretary has issued a rule granting a waiver under subsection (d).

(E) If the code sets forth one or more optional combinations of items which meet the energy consumption or conservation objective, for every combination which includes a covered product the efficiency of which exceeds either standard or level referred to in subparagraph (D), there also shall be at least one combination which includes such covered product the efficiency of which does not exceed such standard or level by more than 5 percent, except that at least one combination shall include such covered product the efficiency of which meets but does not exceed such standard.

(F) The energy consumption or conservation objective is specified in terms of an estimated total consumption of energy (which may be calculated from energy loss- or gain-based codes) utilizing an equivalent amount of energy (which may be specified in units of energy or its equivalent cost).]

(B) The code does not contain a mandatory requirement that, under all code compliance paths, requires that the covered product have an energy efficiency exceeding 1 of the following levels:

(i) The applicable energy conservation standard estab-

lished in or prescribed under section 325.

(ii) The level required by a regulation of the State for which the Secretary has issued a rule granting a waiver

 $under\ subsection\ (d).$

(C) If the energy consumption or conservation objective in the code is determined using covered products, including any baseline building designs against which all submitted building designs are to be evaluated, the objective is based on the use of covered products having efficiencies not exceeding—

(i) for residential furnaces, central air conditioners, and heat pumps, effective not earlier than January 1, 2013, and until such time as a level takes effect for the product under

clause (ii)—

(I) for the States described in section 325(f)(5)(B)(i)—
(aa) for gas furnaces, an AFUE level determined
by the Secretary; and

(bb) 14 SEER for central air conditioners (not

including heat pumps);

(II) for the States and other localities described in section 325(d)(4)(B)(i) (except for the States of Arizona, California, Nevada, and New Mexico)—

(aa) for gas furnaces, an AFUE level determined

by the Secretary; and

(bb) 15 SEER for central air conditioners;

(III) for the States of Arizona, California, Nevada, and New Mexico—

(aa) for gas furnaces, an AFUE level determined by the Secretary;

(bb) 15 SEER for central air conditioners;

(cc) an EER of 12.5 for air conditioners (not including heat pumps) with cooling capacity less than 45,000 Btu per hour; and

(dd) an EER of 12.0 for air conditioners (not including heat pumps) with cooling capacity of

45,000 Btu per hour or more; and

(IV) for all States—

(aa) 85 percent AFUE for oil furnaces; and (bb) 15 SEER and 8.5 HSPF for heat pumps;

(ii) the building code levels established pursuant to section 325; or

(iii) the applicable standards or levels specified in sub-

paragraph (B).

(D) The credit to the energy consumption or conservation objective allowed by the code for installing a covered product having an energy efficiency exceeding the applicable standard or level specified in subparagraph (C) is on a 1-for-1 equivalent energy use or equivalent energy cost basis, which may take into account the typical lifetimes of the products and building features, using lifetimes for covered products based on information published by the Department of Energy or the American Society of Heating, Refrigerating and Air-Conditioning Engineers.

(E) If the code sets forth 1 or more combinations of items that meet the energy consumption or conservation objective, and if 1 or more combinations specify an efficiency level for a covered product that exceeds the applicable standards and levels specified in subparagraph (B)—

(i) there is at least 1 combination that includes such covered products having efficiencies not exceeding 1 of the standards or levels specified in subparagraph (B); and

- (ii) if 1 or more combinations of items specify an efficiency level for a furnace, central air conditioner, or heat pump that exceeds the applicable standards and levels specified in subparagraph (B), there is at least 1 combination that the State has found to be reasonably achievable using commercially available technologies that includes such products having efficiencies at the applicable levels specified in subparagraph (C), except that no combination need include a product having an efficiency less than the level specified in subparagraph (B)(ii).
- (F) The energy consumption or conservation objective is specified in terms of an estimated total consumption of energy (which may be specified in units of energy or its equivalent cost)
- (G) The estimated energy use of any covered product permitted or required in the code, or used in calculating the objective, is determined using the applicable test procedures prescribed under section 323, except that the State may permit the estimated energy use calculation to be adjusted to reflect the conditions of the areas where the code is being applied if such adjustment is based on the use of the applicable test procedures prescribed under section 323 or other technically accurate documented procedure.

(4)(A) Subject to subparagraph (B), a State or local government is not required to submit a petition to the Secretary in order to enforce or apply its building code or to establish that the code meets the conditions set forth in this subsection.

- (B) If a building code contains a mandatory requirement that, under all code compliance paths, requires the installation of covered products with efficiencies exceeding both the applicable Federal standard established in or prescribed under section 325 and the applicable standard of such State, if any, that has been granted a waiver under subsection (d), such requirement of the building code shall not be applicable [unless the Secretary has granted a waiver for such requirement under subsection (d)].
- (5) Replacement of covered product.—Paragraph (3) shall not apply to the replacement of a covered product serving an existing building unless the replacement results in an increase in capacity greater than—
 - (A) 12,000 Btu per hour for residential air conditioners and heat pumps; or

(B) 20 percent for other covered products.

* * * * * * *

(1) [for any manufacturer or private labeler to distribute] for any manufacturer (or representative of a manufacturer), distributor, retailer, or private labeler to offer for sale or distribute in commerce any new covered product to which a rule under section 324 applies, unless such covered product is labeled in accordance with such rule;

* * * * * * *

[(5) for any manufacturer or private labeler to distribute in commerce any new covered product which is not in conformity with an applicable energy conservation standard established in or prescribed under this part, except to the extent that the new covered product is covered by a regional standard that is more stringent than the base national standard; or]

(5) for any manufacturer (or representative of a manufac-

turer), distributor, retailer, or private labeler—

(A) to offer for sale or distribute in commerce any new covered product that is not in conformity with an applicable energy conservation standard established in or pre-

scribed under this part; or

(B) if the standard is a regional standard that is more stringent than the base national standard, to offer for sale or distribute in commerce any new covered product having knowledge (consistent with the definition of "knowingly" in section 333(b)) that the product will be installed at a location covered by a regional standard established in or prescribed under this part and will not be in conformity with the standard;

(6) for any manufacturer or private labeler to knowingly sell a product to a distributor, contractor, or dealer with knowledge that the entity routinely violates any regional standard appli-

cable to the product[.];

[(6)](7) [for any manufacturer, distributor, retailer, or private labeler to distribute] for any manufacturer (or representative of a manufacturer), distributor, retailer, or private labeler to offer for sale or distribute in commerce an adapter that—

(A) is designed to allow an incandescent lamp that does not have a medium screw base to be installed into a fixture or lampholder with a medium screw base socket; and

ture or lampholder with a medium screw base socket; and (B) is capable of being operated at a voltage range at

least partially within 110 and 130 volts[.];

(8) for any manufacturer or private labeler to distribute in commerce any new covered product that has not been properly certified in accordance with the requirements established in or prescribed under this part;

(9) for any manufacturer or private labeler to distribute in commerce any new covered product that has not been properly tested in accordance with the requirements established in or

prescribed under this part; and

(10) for any manufacturer or private labeler to violate any regulation lawfully promulgated to implement any provision of

this part.

(b) DEFINITION.—For purposes of this section, the term "new covered product" means a covered product the title of which has not passed to a purchaser who buys such product for purposes other

than (1) reselling such product, or (2) leasing such product for a period in excess of one year.

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PART C—CERTAIN INDUSTRIAL EQUIPMENT

DEFINITIONS

SEC. 340. For purposes of this part—

(1) The term "covered equipment" means one of the following types of industrial equipment:

(A) Electric motors and pumps.

(B) Small commercial package air conditioning and heating equipment.

(C) Large commercial package air conditioning and heating equipment.

- (D) Very large commercial package air conditioning and heating equipment.
- (E) Commercial refrigerators, freezers, and refrigerator-freezers.
 - (F) Automatic commercial ice makers.
 - (G) Walk-in coolers and walk-in freezers.
 - (H) Commercial clothes washers.
- (I) Packaged terminal air-conditioners and packaged terminal heat pumps.

(J) Warm air furnaces and packaged boilers.

- (K) Storage water heaters, instantaneous water heaters, and unfired hot water storage tanks.
- (L) High light output double-ended quartz halogen lamps.

 (\hat{M}) General purpose mercury vapor lamps.

- [(L)] (O) Any other type of industrial equipment which the Secretary classifies as covered equipment under section 341(b).
- (2)(A) The term "industrial equipment" means any article of equipment referred to in subparagraph (B) of a type—
 - (i) which in operation consumes, or is designed to consume, energy;
 - (ii) which, to any significant extent, is distributed in commerce for industrial or commercial use; and
 - (iii) which is not a "covered product" as defined in section 321(a)(2), other than a component of a covered product with respect to which there is in effect a determination under section 341(c);

without regard to whether such article is in fact distributed in commerce for industrial or commercial use.

(B) The types of equipment referred to in this subparagraph (in addition to electric motors and pumps, commercial package air conditioning and heating equipment, commercial refrigerators, freezers, and refrigerator-freezers, automatic commercial ice makers, commercial clothes washers, packaged terminal air-conditioners, packaged terminal heat pumps, warm air furnaces, packaged boilers, storage water heaters, instantaneous water heaters, [and] unfired hot water storage tanks

high light output double-ended quartz halogen lamps, and general purpose mercury vapor lamps) are as follows:

(i) compressors;

(ii) fans;

(iii) blowers;

(iv) refrigeration equipment;

(v) electric lights;

- (vi) electrolytic equipment;
- (vii) electric arc equipment;

(viii) steam boilers;

(ix) ovens;

(x) kilns;

(xi) evaporators; [and]

(xii) dryers[.]; and

(xiii) other motors.

(3) The term "energy efficiency" means the ratio of the useful output of services from an article of industrial equipment to the energy use by such article, determined in accordance with test procedures under section 343.

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(12)(A) The term "storage water heater" means a water heater that heats and stores water within the appliance at a thermostatically controlled temperature for delivery on demand. Such term does not include units with an input rating of 4000 Btu per hour or more per gallon of stored water.

(B) The term "instantaneous water heater" means a water heater that has an input rating of at least 4000 Btu per hour

per gallon of stored water.

(C) The term "unfired hot water storage tank" means a tank used to store water that is heated externally.

(13) Electric motor.—

- [(A)] GENERAL PURPOSE ELECTRIC MOTOR (SUBTYPE I).—
 The term "general purpose electric motor (subtype I)"
 means any motor that meets the definition of "General
 Purpose" as established in the final rule issued by the Department of Energy entitled "Energy Efficiency Program
 for Certain Commercial and Industrial Equipment: Test
 Procedures, Labeling, and Certification Requirements for
 Electric Motors" (10 CFR 431), as in effect on the date of
 enactment of the Energy Independence and Security Act of
 2007.
- [(B)] GENERAL PURPOSE ELECTRIC MOTOR (SUBTYPE II).— The term "general purpose electric motor (subtype II)" means motors incorporating the design elements of a general purpose electric motor (subtype I) that are configured as 1 of the following:

(i) A U-Frame Motor.

[(ii) A Design C Motor.

(iii) A close-coupled pump motor.

[(iv) A Footless motor.

(v) A vertical solid shaft normal thrust motor (as tested in a horizontal configuration).

[(vi) An 8-pole motor (900 rpm).

[(vii) A poly-phase motor with voltage of not more than 600 volts (other than 230 or 460 volts.]

(A) IN GENERAL.—The term "electric motor" means any of the following:

(i) A motor that is a general purpose T-frame, single-speed, foot-mounting, polyphase squirrel-cage induction motor of the National Electrical Manufacturers Association, Design A and B, continuous rated, operating on 230/460 volts and constant 60 Hertz line power as defined in NEMA Standards Publication MG1–1987.

(ii) A motor incorporating the design elements described in clause (i), but is configured to incorporate 1

or more of the following variations:

(I) U-frame motor.

(II) NEMA Design C motor.

(III) Close-coupled pump motor.

(IV) Footless motor.

(V) Vertical solid shaft normal thrust motor (as tested in a horizontal configuration).

(VI) 8-pole motor.

(VII) Poly-phase motor with a voltage rating of not more than 600 volts (other than 230 volts or 460 volts, or both, or can be operated on 230 volts or 460 volts, or both).

[(C)**]** (B) The term "definite purpose motor" means any motor designed in standard ratings with standard operating characteristics or standard mechanical construction for use under service conditions other than usual or for use on a particular type of application and which cannot be used in most general purpose applications.

[(D)**]** (C) The term "special purpose motor" means any motor, other than a general purpose motor or definite purpose motor, which has special operating characteristics or special mechanical construction, or both, designed for a particular application.

[(E)] (D) The term "open motor" means a motor having ventilating openings which permit passage of external cooling air over and around the windings of the machine.

[(F)**]** (E) The term "enclosed motor" means a motor so enclosed as to prevent the free exchange of air between the inside and outside of the case but not sufficiently enclosed to be termed airtight.

[(G)**]** (F) The term "small electric motor" means a NEMA general purpose alternating current single-speed induction motor, built in a two-digit frame number series in accordance with NEMA Standards Publication MG1–1987.

[(H)**]** (G) The term "efficiency" when used with respect to an electric motor means the ratio of an electric motor's useful power output to its total power input, expressed in percentage.

[(I)] (H) The term "nominal full load efficiency" means the average efficiency of a population of motors of duplicate design as determined in accordance with NEMA

Standards Publication MG1-1987.

(14) The term "ASHRAE" means the American Society of Heating, Refrigerating, and Air Conditioning Engineers.

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(22) The term "harvest rate" means the amount of ice (at 32

degrees F) in pounds produced per 24 hours.

[(22)] (23) SINGLE PACKAGE VERTICAL AIR CONDITIONER.— The term "single package vertical air conditioner" means aircooled commercial package air conditioning and heating equipment that—

(A) is factory-assembled as a single package that—

(i) has major components that are arranged vertically;

(ii) is an encased combination of cooling and optional

heating components; and

(iii) is intended for exterior mounting on, adjacent interior to, or through an outside wall;

(B) is powered by a single- or 3-phase current;

(C) may contain 1 or more separate indoor grilles, outdoor louvers, various ventilation options, indoor free air discharges, ductwork, well plenum, or sleeves; and

(D) has heating components that may include electrical resistance, steam, hot water, or gas, but may not include

reverse cycle refrigeration as a heating means.

[(23)] (24) SINGLE PACKAGE VERTICAL HEAT PUMP.—The term "single package vertical heat pump" means a single package vertical air conditioner that—

(A) uses reverse cycle refrigeration as its primary heat

source; and

(B) may include secondary supplemental heating by means of electrical resistance, steam, hot water, or gas.

(25) GENERAL PURPOSE MERCURY VAPORLAMP.—The term 'general purpose mercury vapor lamp' means a mercury vapor lamp (as defined in section 321) that—

(A) has a screw base;

(B) is designed for use in general lighting applications (as defined in section 321);

(C) is not a specialty application mercury vapor lamp;

(D) is designed to operate on a mercury vapor lamp ballast (as defined in section 321) or is a self-ballasted lamp. (26) High light output double-ended quartz halogen lamp' means a 25 lamp that—

(Å) is designed for general outdoor lighting purposes;

(B) contains a tungsten filament;

- (C) has a rated initial lumen value of greater than 6,000 and less than 40,000 lumens;
- (D) has at each end a recessed single contact, R7s base; (E) has a maximum overall length (MOL) between 4 and 11 inches;

(F) has a nominal diameter less than 3/4 inch (T6);

(G) is designed to be operated at a voltage not less than 110 volts and not greater than 200 volts or is designed to be operated at a voltage between 235 volts and 300 volts; (H) is not a tubular quartz infrared heat lamp; and

(I) is not a lamp marked and marketed as a Stage and Studio lamp with a rated life of 500 hours or less.

(27) Specialty application mercury vapor lamp' means a mercury vapor lamp (as defined in section 321) that is—

(A) designed only to operate on a specialty application mercury vapor lamp ballast (as defined in section 321); and (B) is marked and marketed for specialty applications

only.

(28) Tubular quartz infrared heat lamp' means a double-ended quartz halogen lamp that—

(A) is marked and marketed as an infrared heat lamp;

and

(B) radiates predominately in the infrared radiation range and in which the visible radiation is not of principle interest.

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STANDARDS

SEC. 342. (a) SMALL, LARGE, AND VERY LARGE COMMERCIAL PACKAGE AIR CONDITIONING AND HEATING EQUIPMENT, PACKAGED TERMINAL AIR CONDITIONERS AND HEAT PUMPS, WARM-AIR FURNACES, PACKAGED BOILERS, STORAGE WATER HEATERS, INSTANTANEOUS WATER HEATERS, AND UNFIRED HOT WATER STORAGE TANKS.—(1) Each small commercial package air conditioning and heating equipment (including single package vertical air conditioners and single package vertical heat pumps) manufactured on or after January 1, 1994, shall meet the following standard levels:

* * * * * * * *

(6) AMENDED ENERGY EFFICIENCY STANDARDS.—

(A) IN GENERAL.—

- (i) ANALYSIS OF POTENTIAL ENERGY SAVINGS.—If ASHRAE/IES Standard 90.1 is amended with respect to any small commercial package air conditioning and heating equipment, large commercial package air conditioning and heating equipment, very large commercial package air conditioning and heating equipment, packaged terminal air conditioners, packaged terminal heat pumps, warm-air furnaces, packaged boilers, storage water heaters, instantaneous water heaters, or unfired hot water storage tanks, not later than 180 days after the amendment of the standard, the Secretary shall publish in the Federal Register for public comment an analysis of the energy savings potential of amended energy efficiency standards.
- (ii) AMENDED UNIFORM NATIONAL STANDARD FOR PRODUCTS
 - (I) IN GENERAL.—Except as provided in subclause (II), not later than 18 months after the date of publication of the amendment to the ASHRAE/IES Standard 90.1 for a product described in clause (i), the Secretary shall establish an amended uniform national standard for the product at

the minimum level specified in the amended ASHRAE/IES Standard 90.1.

(II) More stringent standard.—Subclause (I) shall not apply if the Secretary determines, by rule published in the Federal Register, and supported by clear and convincing evidence, that adoption of a uniform national standard more stringent than the amended ASHRAE/IES Standard 90.1 for the product would result in significant additional conservation of energy and is technologically feasible and economically justified.

(B) Rule.— [If the Secretary] (i) In General.—If the

(B) RULE.— [If the Secretary] (i) In General.—If the Secretary makes a determination described in [clause (ii)(II)] subparagraph (A)(ii)(II) for a product described in [clause (i)] subparagraph (A)(i), not later than 30 months after the date of publication of the amendment to the ASHRAE/IES Standard 90.1 for the product, the Secretary shall issue the rule establishing the amended standard.

(ii) FACTORS.—In determining whether a standard is economically justified for the purposes of subparagraph (A)(ii)(II), the Secretary shall, after receiving views and comments furnished with respect to the proposed standard, determine whether the benefits of the standard exceed the burden of the proposed standard by, to the maximum extent practicable, considering—

(I) the economic impact of the standard on the manufacturers and on the consumers of the products subject

to the standard;

(II) the savings in operating costs throughout the estimated average life of the product in the type (or class) compared to any increase in the price of, or in the initial charges for, or maintenance expenses of, the products that are likely to result from the imposition of the standard:

(III) the total projected quantity of energy savings likely to result directly from the imposition of the

standard:

(IV) any lessening of the utility or the performance of the products likely to result from the imposition of the standard:

(V) the impact of any lessening of competition, as determined in writing by the Attorney General, that is likely to result from the imposition of the standard;

(VI) the need for national energy conservation; and (VII) other factors the Secretary considers relevant.

(iii) Administration.—

(I) Energy Use and Efficiency.—The Secretary may not prescribe any amended standard under this paragraph that increases the maximum allowable energy use, or decreases the minimum required energy efficiency, of a covered product.

(II) UNAVAILABILITY.—

(aa) IN GENERAL.—The Secretary may not prescribe an amended standard under this subparagraph if the Secretary finds (and publishes the finding) that interested persons have established by a preponderance of the evidence that a standard is likely to result in the unavailability in the United States in any product type (or class) of performance characteristics (including reliability, features, sizes, capacities, and volumes) that are substantially the same as those generally available in the United States at the time of the finding of the Secretary.

(bb) Other types or classes.—The failure of some types (or classes) to meet the criterion established under this subclause shall not affect the determination of the Secretary on whether to prescribe a standard for the other types or classes.";

[(iii) CONSIDERATION OF PRICES AND OPERATING PAT-TERNS.—If the Secretary is considering revised standards for air-cooled 3-phase central air conditioners and central air conditioning heat pumps with less 65,000 Btu per hour (cooling capacity), the Secretary shall use commercial energy prices and operating patterns in all analyses conducted by the Secretary.

(C) AMENDMENT OF STANDARD.—

(i) IN GENERAL.—Not later than 6 years after issuance of any final rule establishing or amending a standard, as required for a product under this part, the Secretary shall publish-

(iv) APPLICATION TO PRODUCTS.—[An amendment prescribed under this subsection] Notwithstanding subparagraph (D), an amendment described under this subparagraph shall apply to products manufactured after a date that is the later of—

(I) the date that is 3 years after publication of the final rule establishing a new standard; or

(II) the date that is 6 years after the effective date of the current standard for a covered product.

(v) REPORTS.—The Secretary shall promptly submit to the Committee on Energy and Commerce of the House of Representatives and the Committee on Energy and Natural Resources of the Senate a progress report every 180 days on compliance with this subparagraph, including a specific plan to remedy any failures to comply with deadlines for action established under this subparagraph.

(vi) Consideration of Prices and Operating Pat-TERNS.—If the Secretary is considering revised standards for air-cooled 3-phase central air conditioners and central air conditioning heat pumps with less 65,000 Btu per hour (cooling capacity), the Secretary shall use commercial energy prices and operating patterns in all analyses conducted by the Secretary.

(10) SINGLE PACKAGE VERTICAL AIR CONDITIONERS AND SIN-GLE PACKAGE VERTICAL HEAT PUMPS.—

(A) IN GENERAL.—Single package vertical air conditioners and single package vertical heat pumps manufactured on or after January 1, 2010, shall meet the following standards:

(i) The minimum energy efficiency ratio of single package vertical air conditioners less than 65,000 Btu per hour (cooling capacity), single-phase, shall be 9.0.

(ii) The minimum energy efficiency ratio of single package vertical air conditioners less than 65,000 Btu per hour (cooling capacity), 3-phase, shall be 9.0.

(iii) The minimum energy efficiency ratio of single package vertical air conditioners at or above 65,000 Btu per hour (cooling capacity) but less than 135,000 Btu per hour (cooling capacity), shall be 8.9.

(iv) The minimum energy efficiency ratio of single package vertical air conditioners at or above 135,000 Btu per hour (cooling capacity) but less than 240,000

Btu per hour (cooling capacity), shall be 8.6.

(v) The minimum energy efficiency ratio of single package vertical heat pumps less than 65,000 Btu per hour (cooling capacity), single-phase, shall be 9.0 and the minimum coefficient of performance in the heating mode shall be 3.0.

(vi) The minimum energy efficiency ratio of single package vertical heat pumps less than 65,000 Btu per hour (cooling capacity), 3-phase, shall be 9.0 and the minimum coefficient of performance in the heating mode shall be 3.0.

(vii) The minimum energy efficiency ratio of single package vertical heat pumps at or above 65,000 Btu per hour (cooling capacity) but less than 135,000 Btu per hour (cooling capacity), shall be 8.9 and the minimum coefficient of performance in the heating mode shall be 3.0.

(viii) The minimum energy efficiency ratio of single package vertical heat pumps at or above 135,000 Btu per hour (cooling capacity) but less than 240,000 Btu per hour (cooling capacity), shall be 8.6 and the minimum coefficient of performance in the heating mode shall be 2.9.

(B) REVIEW.—Not later than 3 years after the date of enactment of this paragraph, the Secretary shall review the most recently published ASHRAE/IES Standard 90.1 with respect to single package vertical air conditioners and single package vertical heat pumps in accordance with the procedures established under paragraph (6).

(11) Warm air furnaces with an input rating of 225,000 Btu per hour or more and manufactured on or after the date that is 1 year after the date of enactment of this paragraph shall meet the following standard levels:

"(A) Gas-fired units shall—

"(i) have a minimum thermal efficiency of 80 percent; "(ii) include an interrupted or intermittent ignition device;

"(iii) have jacket losses not exceeding 0.75 percent of the input rating; and

'(iv) have power venting or a flue damper.

"(B) Oil-fired units shall have-

"(i) a minimum thermal efficiency of 81 percent; "(ii) jacket losses not exceeding 0.75 percent of the input rating; and

'(iii) power venting or a flue damper.

(b) ELECTRIC MOTORS.—(1) Except for definite purpose motors, special purpose motors, and those motors exempted by the Secretary under [paragraph (2)] paragraph (3), each electric motor manufactured (alone or as a component of another piece of equipment) after the 60-month period beginning on the date of the enactment of this subsection, or in the case of an electric motor which requires listing or certification by a nationally recognized safety testing laboratory, after the 84-month period beginning on such date, shall have a nominal full load efficiency of not less than the following:

(2) Standards Effective Beginning December 19, 2010.-

(A) In General.—Except for definite purpose motors, special purpose motors, and those motors exempted by the Secretary under paragraph (3) and except as provided for in subparagraphs (B), (C), and (D), each electric motor manufactured with power ratings from 1 to 200 horsepower (alone or as a component of another piece of equipment) on or after December 19, 2010, shall have a nominal full load efficiency of not less than the nominal full load efficiency described in NEMA MG-1 (2006) Table 12–12.

(B) Fire pump electric motors.—Except for those motors exempted by the Secretary under paragraph (3), each fire pump electric motor manufactured with power ratings from 1 to 200 horsepower (alone or as a component of another piece of equipment) on or after December 19, 2010, shall have a nominal full load efficiency that is not less than the nominal full load efficiency described in NEMA MG-1 (2006) Table 12-11.

(C) Nema design be electric motors.—Except for those motors exempted by the Secretary under paragraph (3), each NEMA Design B electric motor with power ratings of more than 200 horsepower, but not greater than 500 horsepower, manufactured (alone or as a component of another piece of equipment) on or after December 19, 2010, shall have a nominal full load efficiency of not less than the nominal full load efficiency described in NEMA MG-1 (2006) Table 12-11.

(D) Motors incorporating certain design elements.—Except for those motors exempted by the Secretary under paragraph (3), each electric motor described in section 340(13)(A)(ii) manufactured with power ratings from 1 to 200 horsepower (alone or as a component of another piece of equipment) on or after December 19, 2010, shall have a nominal full load efficiency of not less than the nominal full load efficiency described in NEMA MG-1 (2006) Table 12-11.

[(2)] (3) (A) The Secretary may, by rule, provide that the standards specified in [paragraph (1)] paragraphs (1) and (2) shall not apply to certain types or classes of electric motors if—

(i) compliance with such standards would not result in significant energy savings because such motors cannot be used in most general purpose applications or are very unlikely to be used in most general purpose applications; and

(ii) standards for such motors would not be technologically

feasible or economically justified.

(B) Not later than one year after the date of the enactment of this subsection, a manufacturer seeking an exemption under this paragraph with respect to a type or class of electric motor developed on or before the date of the enactment of such subsection shall submit a petition to the Secretary requesting such exemption. Such petition shall include evidence that the type or class of motor meets the criteria for exemption specified in subparagraph (A).

(C) Not later than two years after the date of the enactment of this subsection, the Secretary shall rule on each petition for exemption submitted pursuant to subparagraph (B). In making such ruling, the Secretary shall afford an opportunity for public comment.

(D) Manufacturers of types or classes of motors developed after the date of the enactment of this subsection to which standards under [paragraph (1)] paragraphs (1) and (2) would be applicable may petition the Secretary for exemptions from compliance with such standards based on the criteria specified in subparagraph (A).

[(3)] (4)(A) The Secretary shall publish a final rule no later than the end of the 24-month period beginning on the effective date of the standards established under paragraph (1) to determine if such standards should be amended. Such rule shall provide that any amendment shall apply to electric motors manufactured on or after a date which is five years after the effective date of the standards established under paragraph (1).

(B) The Secretary shall publish a final rule no later than 24 months after the effective date of the previous final rule to determine whether to amend the standards in effect for such product. Any such amendment shall apply to electric motors manufactured

after a date which is five years after-

(i) the effective date of the previous amendment; or

- (ii) if the previous final rule did not amend the standards, the earliest date by which a previous amendment could have been effective.
- (c) Commercial Refrigerators, Freezers, and Refrigerator-Freezers.—(1) In this subsection:
 - (A) The term "AV" means the adjusted volume (ft3) (defined as 1.63 × frozen temperature compartment volume (ft3) + chilled temperature compartment volume (ft3)) with compartment volumes measured in accordance with the Association of

Home Appliance Manufacturers Standard HRF1–1979.
(B) The term "V" means the chilled or frozen compartment volume (ft3) (as defined in the Association of Home Appliance

Manufacturers Standard HRF1–1979).

(C) The term "service over the counter, self-contained, medium temperature commercial refrigerator" or "(SOC-SC-M)" means a medium temperature commercial refrigerator—

(i) with a self-contained condensing unit and equipped with sliding or hinged doors in the back intended for use by sales personnel, and with glass or other transparent material in the front for displaying merchandise; and

(ii) that has a height not greater than 66 inches and is intended to serve as a counter for transactions between

sales personnel and customers.
(D) The term "TDA" means the total display area (ft²) of the refrigerated case, as defined in AHRI Standard 1200.

[(C)] (E) Other terms have such meanings as may be established by the Secretary, based on industry-accepted definitions

and practice.

(2) Each commercial refrigerator, freezer, and refrigerator-freezer with a self-contained condensing unit designed for holding temperature applications manufactured on or after January 1, 2010, shall have a daily energy consumption (in kilowatt hours per day) that does not exceed the following:

| Refrigerators with solid doors | 0.10V | +2.045 |
|--|--------|-----------------|
| Refrigerators with transparent doors | 0.12V | +3.345 |
| Freezers with solid doors | 0.40V | +1.385 |
| Freezers with transparent doors | 0.75V | +4.105 |
| Refrigerators/freezers with solid doors the greater of | 0.27AV | -0.71 or 0.70 |

(3) Each commercial refrigerator with a self-contained condensing unit designed for pull-down temperature applications and transparent doors manufactured on or after January 1, 2010, shall have a daily energy consumption (in kilowatt hours per day) of not

more than 0.126 V + 3.51.

(4) Each SOC-SC-M manufactured on or after January 1, 2012, shall have a total daily energy consumption (in kilowatt hours per day) of not more than $0.6 \times TDA + 1.0$.

[(4)] (5)(A) Not later than January 1, 2009, the Secretary shall issue, by rule, standard levels for ice-cream freezers, self-contained commercial refrigerators, freezers, and refrigerator-freezers without doors, and remote condensing commercial refrigerators, freezers, and refrigerator-freezers, with the standard levels effective for equipment manufactured on or after January 1, 2012.

(B) The Secretary may issue, by rule, standard levels for other types of commercial refrigerators, freezers, and refrigerator-freezers not covered by paragraph (2)(A) with the standard levels effective for equipment manufactured 3 or more years after the date on

which the final rule is published.

[(5)] (6)(A) Not later than January 1, 2013, the Secretary shall issue a final rule to determine whether the standards established

under this subsection should be amended.

(B) Not later than 3 years after the effective date of any amended standards under subparagraph (A) or the publication of a final rule determining that the standards should not be amended, the Secretary shall issue a final rule to determine whether the standards established under this subsection or the amended standards, as applicable, should be amended.

(C) If the Secretary issues a final rule under subparagraph (A) or (B) establishing amended standards, the final rule shall provide that the amended standards apply to products manufactured on or

after the date that is-

(i) 3 years after the date on which the final amended stand-

ard is published; or

(ii) if the Secretary determines, by rule, that 3 years is inadequate, not later than 5 years after the date on which the final rule is published.

(d) AUTOMATIC COMMERCIAL ICE MAKERS.—

(g) High Light Output Double-Ended Quartzhalogen LAMPS.—A high light output double-ended quartz halogen lamp manufactured on or after January 1, 2016, shall have a minimum efficiency of-

(1) 27 LPW for lamps with a minimum rated initial lumen value greater than 6,000 and a maximum initial lumen value

of 15,000; and

(2) 34 LPW for lamps with a rated initial lumen value great-

er than 15,000 and less than 40,000.

(h) General Purpose Mercury Vapor Lamps.—A general purpose mercury vapor lamp shall not be manufactured on or after January 1, 2016.

X

TEST PROCEDURES

Sec. 343. (a) Prescription by Secretary; Requirements.—

(1) Test procedures.

(A) AMENDMENT.—At least once every 7 years, the Secretary shall conduct an evaluation of each class of covered equipment and-

(i) if the Secretary determines that amended test procedures would more accurately or fully comply with the requirements of paragraphs (2) and (3), shall prescribe test procedures for the class in accordance with this section; or

(ii) shall publish notice in the Federal Register of any determination not to amend a test procedure.]

(1) Amendment and petition process.

(A) In general.—At least once every 7 years, the Secretary shall review test procedures for all covered equipment and-

(i) publish in the Federal Register amended test procedures with respect to any covered equipment, if the Secretary determines that amended test procedures would more accurately or fully comply with paragraphs (2) and (3); or

(ii) publish notice in the Federal Register of any de-

termination not to amend a test procedure.

(B) PETITIONS.-

(i) In general.—In the case of any class or category of covered equipment, any person may petition the Secretary to conduct a rulemaking—

(I) to prescribe a test procedure for the covered

equipment: or

(II) to amend the test procedures applicable to the covered equipment to more accurately or fully comply with paragraphs (2) and (3).

(ii) Determination.—The Secretary shall—

(I) not later than 90 days after the date of receipt of the petition, publish the petition in the Federal Register; and

(II) not later than 180 days after the date of receipt of the petition, grant or deny the petition.

(iii) BASIS.—The Secretary shall grant a petition if the Secretary finds that the petition contains evidence that, assuming no other evidence was considered, provides an adequate basis for determining that an amended test method would more accurately promote energy or water use efficiency.

(iv) Effect on other requirements.—The granting of a petition by the Secretary under this paragraph shall create no presumption with respect to the determination of the Secretary that the proposed test procedure meets the requirements of paragraphs (2) and (3).

(v) RULEMAKING.—

(I) IN GENERAL.—Except as provided in subclause (II), not later than the end of the 18-month period beginning on the date of granting a petition, the Secretary shall publish an amended test method or a determination not to amend the test method

(II) EXTENSION.—The Secretary may extend the period described in subclause (I) for 1 additional year.

(III) DIRECT FINAL RULE.—The Secretary may adopt a consensus test procedure in accordance with the direct final rule procedure established under section 325(p).

* * * * * * *

(4)(A) With respect to small commercial package air conditioning and heating equipment, large commercial package air conditioning and heating equipment, very large commercial package air conditioning and heating equipment, packaged terminal air conditioners, packaged terminal heat pumps, warmair furnaces, packaged boilers, storage water heaters, instantaneous water heaters, and unfired hot water storage tanks to which standards are applicable under section 342, the test procedures shall be those generally accepted industry testing procedures or rating procedures developed or recognized by the [Air-Conditioning and Refrigeration Institute] Air-Conditioning, Heating, and Refrigeration Institute, or by the American Society of Heating, Refrigerating and Air Conditioning Engineers, as referenced in ASHRAE/IES Standard 90.1 and in effect on June 30, 1992.

* * * * * * *

(7)(A) In the case of automatic commercial ice makers, the test procedures shall be the test procedures specified in [Air-Conditioning and Refrigeration Institute] Air-Conditioning, Heating, and Refrigeration Institute Standard 810–2003, as in effect on January 1, 2005.

(B)(i) If [Air-Conditioning and Refrigeration Institute] Air-Conditioning, Heating, and Refrigeration Institute Standard 810–2003 is amended, the Secretary shall amend the test procedures established in subparagraph (A) as necessary to be consistent with the amended [Air-Conditioning and Refrigeration Institute] Air-Conditioning, Heating, and Refrigeration Institute Standard, unless the Secretary determines, by rule, published in the Federal Register and supported by clear and convincing evidence, that to do so would not meet the requirements for test procedures under paragraphs (2) and (3).

(ii) If the Secretary issues a rule under clause (i) containing a determination described in clause (ii), the rule may establish an amended test procedure for the product that meets the re-

quirements of paragraphs (2) and (3).

(C) The Secretary shall comply with section 323(e) in establishing any amended test procedure under this paragraph.

(8) With respect to commercial clothes washers, the test procedures shall be the same as the test procedures established by the Secretary for residential clothes washers under section 325(g).

(9) WALK-IN COOLERS AND WALK-IN FREEZERS.—

(A) IN GENERAL.—For the purpose of test procedures for walk-in coolers and walk-in freezers:

(i) The R value shall be the 1/K factor multiplied by the thickness of the panel.

(ii) The K factor shall be based

(ii) The K factor shall be based on ASTM test procedure C518–2004.

(iii) For calculating the R value for freezers, the K factor of the foam at 20F (average foam temperature) shall be used.

(iv) For calculating the R value for coolers, the K factor of the foam at 55F (average foam temperature) shall be used.

(B) Test procedure.—

- (i) IN GENERAL.—Not later than January 1, 2010, the Secretary shall establish a test procedure to measure the energy-use of walk-in coolers and walk-in freezers.
- (ii) COMPUTER MODELING.—The test procedure may be based on computer modeling, if the computer model or models have been verified using the results of laboratory tests on a significant sample of walk-in coolers and walk-in freezers.

(b) Before prescribing any final test procedures under this section, the Secretary shall—

(1) publish proposed test procedures in the Federal Register; and

(2) afford interested persons an opportunity (of not less than 45 days' duration) to present oral and written data, views, and

arguments on the proposed test procedures.

[(c)(1) The Secretary shall, not later than 3 years after the date of prescribing a test procedure under this section (and from time to time thereafter), conduct a reevaluation of such procedure and, on the basis of such reevaluation, shall determine if such test procedure should be amended. In conducting such reevaluation, the

Secretary shall take into account such information as he deems relevant, including technological developments relating to the energy efficiency of the type (or class) of covered equipment involved.

[(2) If the Secretary determines under paragraph (1) that a test procedure should be amended, he shall promptly publish in the Federal Register proposed test procedures incorporating such amendments and afford interested persons an opportunity to present oral and written data, views, and arguments. Such com-

ment period shall not be less than 45 days' duration.

[(d)](c)(1) Effective 180 days (or, in the case of small commercial package air conditioning and heating equipment, large commercial package air conditioning and heating equipment, very large commercial package air conditioning and heating equipment, commercial refrigerators, freezers, and refrigerator-freezers, automatic commercial ice makers, commercial clothes washers, packaged terminal air conditioners, packaged terminal heat pumps, warm-air furnaces, packaged boilers, storage water heaters, instantaneous water heaters, and unfired hot water storage tanks, 360 days) after a test procedure rule applicable to any covered equipment is prescribed under this section, no manufacturer, distributor, retailer, or private labeler may make any representation—

(A) in writing (including any representation on a label), or

(B) in any broadcast advertisement,

respecting the energy consumption of such equipment or cost of energy consumed by such equipment, unless such equipment has been tested in accordance with such test procedure and such rep-

resentation fairly discloses the results of such testing.

(2) On the petition of any manufacturer, distributor, retailer, or private labeler, filed not later than the 60th day before the expiration of the period involved, the 180-day period referred to in paragraph (1) may be extended by the Secretary with respect to the petitioner (but in no event for more than an additional 180 days) if he finds that the requirements of paragraph (1) would impose on such petitioner an undue hardship (as determined by the Secretary). [(e)] (d) The Secretary may direct the National Bureau of Standards to provide such assistance as the Secretary deems necessary to carry out his responsibilities under this part, including the development of test procedures.

* * * * * * *

ADMINISTRATION, PENALTIES, ENFORCEMENT AND PREEMPTION

SEC. 345. (a) [The] Except as otherwise provided in this section, the provisions of section 326 (a), (b), and (d), the provisions of subsections (l) through (s) of section 325, and section 327 through 336 shall apply with respect to this part (other than the equipment specified in [subparagraphs (B) through (G)] subparagraphs (B), (C), (D), (I), (J), and (K) of section 340(1)) to the same extent and in the same manner as they apply in part B. In applying such provisions for the purposes of this part—

(1) references to sections 323, 324, and 325 shall be considered as references to sections 343, 344, and 342, respectively;

(2) references to "this part" shall be treated as referring to part C;

(3) the term "equipment" shall be substituted for the term "product";

(4) the term "Secretary" shall be substituted for "Commission" each place it appears (other than in section 333(c));

(5) section 327(a) shall be applied, in the case of electric motors, as if the National Appliance Energy Conservation Act of 1987 was the Energy Policy Act of 1992;

(6) section 327(b)(1) shall be applied as if electric motors were fluorescent lamp ballasts and as if the National Appliance Energy Conservation Amendments of 1988 were the Energy Policy Act of 1992;

(7) section 327(b)(4) shall be applied as if electric motors were fluorescent lamp ballasts and as if paragraph (5) of sec-

tion 325(g) were section 342;

- (8) notwithstanding any other provision of law, a regulation or other requirement adopted by a State or subdivision of a State contained in a State or local building code for new construction concerning the energy efficiency or energy use of an electric motor covered under this part is not superseded by the standards for such electric motor established or prescribed under section 342(b) if such regulation or requirement is identical to the standards established or prescribed under such section; [and]
- (9) in the case of commercial clothes washers, section 327(b)(1) shall be applied as if the National Appliance Energy Conservation Act of 1987 was the Energy Policy Act of 2005[.]; and
- (10) section 327 shall apply with respect to the equipment described in section 340(1)(L) beginning on the date on which a final rule establishing an energy conservation standard is issued by the Secretary, except that any State or local standard prescribed or enacted for the equipment before the date on which the final rule is issued shall not be preempted until the energy conservation standard established by the Secretary for the equipment takes effect.

(b)(1) The provisions of section 325(p)(5), section 326(a), (b), and (d), section 327(a), and sections 328 through 336 shall apply with respect to the equipment specified in [subparagraphs (B) through (G)] subparagraphs (B), (C), (D), (I), (J), and (K) of section 340(1) to the same extent and in the same manner as they apply in [part A] part B. In applying such provisions for the purposes of such equipment, paragraphs (1), (2), (3), and (4) of subsection (a) shall apply.

(2)(A) A standard prescribed or established under section 342(a) shall, beginning on the effective date of such standard, supersede any State or local regulation concerning the energy efficiency or energy use of a product for which a standard is prescribed or established.

lished pursuant to such section.

(B) Notwithstanding subparagraph (A), a standard prescribed or established under section 342(a) shall not supersede a standard for such a product contained in a State or local building code for new construction if—

(i) the standard in the building code does not require that the energy efficiency of such product exceed the applicable minimum en-

ergy efficiency requirement in amended ASHRAE/IES Standard 90.1; and

(ii) the standard in the building code does not take effect prior to the effective date of the applicable minimum energy efficiency

requirement in amended ASHRAE/IES Standard 90.1.

(C) Notwithstanding subparagraph (A), a standard prescribed or established under section 342(a) shall not supersede the standards established by the State of California set forth in Table C-6, California Code of Regulations, Title 24, Part 2, Chapter 2-53, for water-source heat pumps below 135,000 Btu per hour (cooling capacity) that become effective on January 1, 1993.

(D) Notwithstanding subparagraph (A), a standard prescribed or established under section 342(a) shall not supersede a State regulation which has been granted a waiver by the Secretary. The Secretary may grant a waiver pursuant to the terms, conditions, criteria, procedures, and other requirements specified in section 327(d) of this Act.

(c) With respect to any electric motor to which standards are applicable under section 342(b), the Secretary shall require manufacturers to certify, through an independent testing or certification program nationally recognized in the United States, that such motor meets the applicable standard.

(d)(1) Except as provided in paragraphs (2) and (3), section 327 shall apply with respect to very large commercial package air conditioning and heating equipment to the same extent and in the same manner as section 327 applies under [part A] part B on the

date of enactment of this subsection.

(2) Any State or local standard issued before the date of enactment of this subsection shall not be preempted until the standards established under section 342(a)(9) take effect on January 1, 2010.

(e)(1)(A) Subsections (a), (b), and (d) of section 326, subsections (m) through (s) of section 325, and sections 328 through 336 shall apply with respect to commercial refrigerators, freezers, and refrigerator-freezers to the same extent and in the same manner as those provisions apply under [part A] part B.

(B) In applying those provisions to commercial refrigerators, freezers, and refrigerator-freezers, paragraphs (1), (2), (3), and (4)

of subsection (a) shall apply.

(2)(A) Section 327 shall apply to commercial refrigerators, freezers, and refrigerator-freezers for which standards are established under paragraphs (2) and (3) of section 342(c) to the same extent and in the same manner as those provisions apply under [part A] part B on the date of enactment of this subsection, except that any State or local standard issued before the date of enactment of this subsection shall not be preempted until the standards established under paragraphs (2) and (3) of section 342(c) take effect.

(B) In applying section 327 in accordance with subparagraph (A),

paragraphs (1), (2), and (3) of subsection (a) shall apply.

(3)(A) Section 327 shall apply to commercial refrigerators, freezers, and refrigerator-freezers for which standards are established under section 342(c)(4) to the same extent and in the same manner as the provisions apply under [part A] part B on the date of publication of the final rule by the Secretary, except that any State or local standard issued before the date of publication of the final rule by the Secretary shall not be preempted until the standards take effect.

(B) In applying section 327 in accordance with subparagraph (A),

paragraphs (1), (2), and (3) of subsection (a) shall apply.

- (4)(A) If the Secretary does not issue a final rule for a specific type of commercial refrigerator, freezer, or refrigerator-freezer within the time frame specified in section 342(c)(5), subsections (b) and (c) of section 327 shall not apply to that specific type of refrigerator, freezer, or refrigerator-freezer for the period beginning on the date that is 2 years after the scheduled date for a final rule and ending on the date on which the Secretary publishes a final rule covering the specific type of refrigerator, freezer, or refrigerator-freezer.
- (B) Any State or local standard issued before the date of publication of the final rule shall not be preempted until the final rule takes effect.
- (5)(A) In the case of any commercial refrigerator, freezer, or refrigerator-freezer to which standards are applicable under paragraphs (2) and (3) of section 342(c), the Secretary shall require manufacturers to certify, through an independent, nationally recognized testing or certification program, that the commercial refrigerator, freezer, or refrigerator-freezer meets the applicable standard.
- (B) The Secretary shall, to the maximum extent practicable, encourage the establishment of at least 2 independent testing and certification programs.

(C) As part of certification, information on equipment energy use

and interior volume shall be made available to the Secretary.

(f)(1)(A)(i) Except as provided in clause (ii), section 327 shall apply to automatic commercial ice makers for which standards have been established under section 342(d)(1) to the same extent and in the same manner as the section applies under [part A] part B on the date of enactment of this subsection.

(ii) Any State standard issued before the date of enactment of this subsection shall not be preempted until the standards estab-

lished under section 342(d)(1) take effect.

(B) In applying section 327 to the equipment under subparagraph (A), paragraphs (1), (2), and (3) of subsection (a) shall apply.

(2)(A)(i) Except as provided in clause (ii), section 327 shall apply to automatic commercial ice makers for which standards have been established under section 342(d)(2) to the same extent and in the same manner as the section applies under **[part A]** part B on the date of publication of the final rule by the Secretary.

(ii) Any State standard issued before the date of publication of the final rule by the Secretary shall not be preempted until the

standards established under section 342(d)(2) take effect.

(B) In applying section 327 in accordance with subparagraph (A),

paragraphs (1), (2), and (3) of subsection (a) shall apply.

(3)(A) If the Secretary does not issue a final rule for a specific type of automatic commercial ice maker within the time frame specified in section 342(d), subsections (b) and (c) of section 327 shall no longer apply to the specific type of automatic commercial ice maker for the period beginning on the day after the scheduled date for a final rule and ending on the date on which the Secretary

publishes a final rule covering the specific type of automatic commercial ice maker.

(B) Any State standard issued before the publication of the final rule shall not be preempted until the standards established in the final rule take effect.

(4)(A) The Secretary shall monitor whether manufacturers are reducing harvest rates below tested values for the purpose of bring-

ing non-complying equipment into compliance.

(B) If the Secretary finds that there has been a substantial amount of manipulation with respect to harvest rates under subparagraph (A), the Secretary shall take steps to minimize the manipulation, such as requiring harvest rates to be within 5 percent of tested values.

(g)(1)(A) If the Secretary does not issue a final rule for commercial clothes washers within the timeframe specified in section 342(e)(2), subsections (b) and (c) of section 327 shall not apply to commercial clothes washers for the period beginning on the day after the scheduled date for a final rule and ending on the date on which the Secretary publishes a final rule covering commercial clothes washers.

(B) Any State or local standard issued before the date on which the Secretary publishes a final rule shall not be preempted until the standards established under section 342(e)(2) take effect.

(2) The Secretary shall undertake an educational program to inform owners of laundromats, multifamily housing, and other sites where commercial clothes washers are located about the new standard, including impacts on washer purchase costs and options for recovering those costs through coin collection.

(h) Walk-In Coolers and Walk-In Freezers.—

(1) COVERED TYPES.—

(A) RELATIONSHIP TO OTHER LAW.—

- (i) IN GENERAL.—Except as otherwise provided in this subsection, section 327 shall apply to walk-in coolers and walk-in freezers for which standards have been established under paragraphs (1), (2), and (3) of section 342(f) to the same extent and in the same manner as the section applies under [part A] part B on the date of enactment of this subsection.
- (ii) STATE STANDARDS.—Any State standard prescribed before the date of enactment of this subsection shall not be preempted until the standards established under paragraphs (1) and (2) of section 342(f) take effect.
- (B) ADMINISTRATION.—In applying section 327 to equipment under subparagraph (A), paragraphs (1), (2), and (3) of subsection (a) shall apply.

(2) Final rule not timely.—

- (A) IN GENERAL.—If the Secretary does not issue a final rule for a specific type of walk-in cooler or walk-in freezer within the timeframe established under paragraph (4) or (5) of section 342(f), subsections (b) and (c) of section 327 shall no longer apply to the specific type of walk-in cooler or walk-in freezer during the period—
 - (i) beginning on the day after the scheduled date for a final rule; and

- (ii) ending on the date on which the Secretary publishes a final rule covering the specific type of walk-in cooler or walk-in freezer.
- (B) STATE STANDARDS.—Any State standard issued before the publication of the final rule shall not be preempted until the standards established in the final rule take effect.
- (3) CALIFORNIA.—Any standard issued in the State of California before January 1, 2011, under title 20 of the California Code of Regulations, that refers to walk-in coolers and walk-in freezers, for which standards have been established under paragraphs (1), (2), and (3) of section 342(f), shall not be preempted until the standards established under [section 342(f)(3)] section 342(f)(4) take effect.

(i) High Light Output Double-Ended Quartz Halogen Lamps.—

- (1) In GENERAL.—Except as provided in paragraph (2), section 327 shall apply to high light output double-ended quartz halogen lamps to the same extent and in the same manner as described in section 325(nn)(1).
- (2) State energy conservation standards.—Any State energy conservation standard that is adopted on or before January 1, 2015, pursuant to a statutory requirement to adopt efficiency standard for reducing outdoor lighting energy use enacted prior to January 31, 2008, shall not be preempted.

ENERGY CONSERVATION STANDARDS FOR HIGH-INTENSITY DISCHARGE LAMPS, DISTRIBUTION TRANSFORMERS, AND SMALL ELECTRIC MOTORS

SEC. 346. (a)(1) The Secretary shall, within 30 months after the date of the enactment of the Energy Policy Act of 1992, prescribe testing requirements for those high-intensity discharge lamps and distribution transformers for which the Secretary makes a determination that energy conservation standards would be technologically feasible and economically justified, and would result in significant energy savings.

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ENERGY INDEPENDENCE AND SECURITY ACT OF 2007

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TITLE III—ENERGY SAVINGS THROUGH IM-PROVED STANDARDS FOR APPLIANCE AND LIGHTING

Subtitle A—Appliance Energy Efficiency

SEC. 301. EXTERNAL POWER SUPPLY EFFICIENCY STANDARDS

(a) Definitions.—Section 321 of the Energy Policy and Conservation Act (42 U.S.C. 6291) is amended—

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SEC. 302. UPDATING APPLIANCE TEST PROCEDURES

(a) CONSUMER APPLIANCES.—Section 323(b)(1) of the Energy Policy and Conservation Act (42 U.S.C. 6293(b)(1)) is amended by striking "(1)" and all that follows through the end of the paragraph and inserting the following:

"(1) Test procedures.—

"(A) AMENDMENT.—At least once every 7 years, the Secretary shall review test procedures for all covered products and—

"(i) amend test procedures with respect to any covered product, if the Secretary determines that amended test procedures would more accurately or fully comply with the requirements of paragraph (3); or

"(ii) publish notice in the Federal Register of any de-

termination not to amend a test procedure.".

(b) INDUSTRIAL EQUIPMENT.—Section 343(a) of the Energy Policy and Conservation Act (42 U.S.C. [6313(a)] 6314(a)) is amended by striking "(a)" and all that follows through the end of paragraph (1) and inserting the following:

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[SEC. 313. ELECTRIC MOTOR EFFICIENCY STANDARDS.

[(a) DEFINITIONS.—Section 340(13) of the Energy Policy and Conservation Act (42 U.S.C. 6311(13)) is amended—

[(1) by redesignating subparagraphs (B) through (H) as subparagraphs (C) through (I), respectively; and

[(2) by striking "(13)(A)" and all that follows through the end of subparagraph (A) and inserting the following:

["(13) ELECTRIC MOTOR.—

I"(A) GENERAL PURPOSE ELECTRIC MOTOR (SUBTYPE I).—
The term 'general purpose electric motor (subtype I)'
means any motor that meets the definition of 'General
Purpose' as established in the final rule issued by the Department of Energy entitled 'Energy Efficiency Program
for Certain Commercial and Industrial Equipment: Test
Procedures, Labeling, and Certification Requirements for
Electric Motors' (10 CFR 431), as in effect on the date of
enactment of the Energy Independence and Security Act of
2007.

["(B) GENERAL PURPOSE ELECTRIC MOTOR (SUBTYPE II).— The term 'general purpose electric motor (subtype II)' means motors incorporating the design elements of a general purpose electric motor (subtype I) that are configured as 1 of the following:

["(i) A U-Frame Motor.

["(ii) A Design C Motor. ["(iii) A close-coupled pump motor.

["(iv) A Footless motor.

["(v) A vertical solid shaft normal thrust motor (as tested in a horizontal configuration).

["(vi) An 8-pole motor (900 rpm).

["(vii) A poly-phase motor with voltage of not more than 600 volts (other than 230 or 460 volts).".

(b) STANDARDS.—

[(1) AMENDMENTS.—Section 342(b) of the Energy Policy and Conservation Act (42 U.S.C. 6313(b)) is amended—

[(A) by redesignating paragraphs (2) and (3) as paragraphs (3) and (4), respectively; and

(B) by inserting after paragraph (1) the following:

["(2) ELECTRIC MOTORS.—

["(A) GENERAL PURPOSE ELECTRIC MOTORS (SUBTYPE I).— Except as provided in subparagraph (B), each general purpose electric motor (subtype I) with a power rating of 1 horsepower or greater, but not greater than 200 horsepower, manufactured (alone or as a component of another piece of equipment) after the 3-year period beginning on the date of enactment of the Energy Independence and Security Act of 2007, shall have a nominal full load efficiency that is not less than as defined in NEMA MG-1 (2006) Table 12–12.

["(B) FIRE PUMP MOTORS.—Each fire pump motor manufactured (alone or as a component of another piece of equipment) after the 3-year period beginning on the date of enactment of the Energy Independence and Security Act of 2007 shall have nominal full load efficiency that is not less than as defined in NEMA MG-1 (2006) Table 12–11.

["(C) GENERAL PURPOSE ELECTRIC MOTORS (SUBTYPE II).—Each general purpose electric motor (subtype II) with a power rating of 1 horsepower or greater, but not greater than 200 horsepower, manufactured (alone or as a component of another piece of equipment) after the 3-year period beginning on the date of enactment of the Energy Independence and Security Act of 2007, shall have a nominal full load efficiency that is not less than as defined in NEMA MG-1 (2006) Table 12–11.

["(D) NEMA DESIGN B, GENERAL PURPOSE ELECTRIC MOTORS.—Each NEMA Design B, general purpose electric motor with a power rating of more than 200 horsepower, but not greater than 500 horsepower, manufactured (alone or as a component of another piece of equipment) after the 3-year period beginning on the date of enactment of the Energy Independence and Security Act of 2007, shall have a nominal full load efficiency that is not less than as defined in NEMA MG-1 (2006) Table 12–11."

[(2) EFFECTIVE DATE.—The amendments made by paragraph (1) take effect on the date that is 3 years after the date of enactment of this Act.]

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SEC. 322. INCANDESCENT REFLECTOR LAMP EFFICIENCY STANDARDS.

(a) Definitions.—Section 321 of the Energy Policy and Conservation Act (42 U.S.C. 6291) (as amended by section 316(c)(1)(D)) is amended—

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(b) STANDARDS FOR FLUORESCENT LAMPS AND INCANDESCENT REFLECTOR LAMPS.—Section 325(i) of the Energy Policy and Conservation Act (42 U.S.C. [6995(i)] 6295(i)) is amended by striking paragraph (1) and inserting the following:

"(1) STANDARDS.—

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SEC. 325. ENERGY EFFICIENCY LABELING FOR CONSUMER ELECTRONIC PRODUCTS. $\ensuremath{\mathsf{T}}$

- (a) In General.—Section 324(a) of the Energy Policy and Conservation Act (42 U.S.C. 6294(a)) (as amended by section 324(d)) is amended—
- (b) CONTENT OF LABEL.—Section 324(c) of the Energy Policy and Conservation Act $(42 \text{ U.S.C. } \llbracket 6924(c) \rrbracket \ 6294(c))$ is amended by adding at the end the following:

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